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**SOCIAL STRATEGIES IN PETTY PRODUCTION:
THREE SMALL SCALE INDUSTRIES IN URBAN SUDAN**

by

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A DISSERTATION

**Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of**

DOCTOR OF PHILOSOPHY

Department of Sociology

1987

ABSTRACT

SOCIAL STRATEGIES IN PETTY PRODUCTION:
THREE SMALL SCALE INDUSTRIES IN URBAN SUDAN

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This is a field study of the social organization of production in the "informal sector" of urban Sudan, Khartoum and Omdurman. Three skilled trades, tailoring, carpentry, and metalworking, were selected for study because of their ubiquity in the urban economy and the relative complexity of their manufacturing strategies, which increasingly involve the use of wage labor. The debates in the literature on this topic relate to the nature of this form of production, whether it is to be considered the result of "dependent development," or as a possible foundation for industrialization. A triangulated research design of participant observer, survey, and documentary methods was used to study the organization of these small scale industries, with an emphasis on the qualitative approach in

order to elicit the subtle patterns of differentiation that are emerging in production. This method produces a disaggregated view of a part of society that has usually been viewed as a homogeneous structure.

Case studies of tailoring, carpentry, and metalworking identify production patterns that are common to all three trades. Tailoring, its means of production relatively easy to obtain, is experiencing a transformation from made-to-order to ready-made production in clothing. Carpenters and metalworkers, their skills and equipment more difficult to obtain, also report dramatic changes in the way they organize their workshops. The latter two trades are using less family labor and depending more on wage labor than they were in the recent past. Sub-contracting relationships are described as they link various levels of petty production to each other and to the world economy.

The increasing levels of wage employment available to workers in the trades and the role of apprenticeship training in contemporary small scale production are also described. Employee and apprentice roles are converging somewhat as the opportunities for apprentices to succeed to independent entrepreneurship become more rare as capital is concentrated in fewer workshops. The study concludes with a discussion of the potential of small scale industries to ease the burgeoning demand for work in urban Africa.

The study contributes to an understanding of a fundamental part of urban life in Sudan. The strategies used

by the majority of the urban population to meet their important needs for employment and income are found to be diverse and dependent on access to a variety of social resources.

For my parents,
with love and appreciation.

Dedicated to the memory of my teacher,
Mahmoud Mohammed Taha

ACKNOWLEDGEMENTS

The successful completion of this study owes much to the patience, tolerance, and hospitality of my informants and of all the people with whom I interacted in Sudan. I am particularly grateful to the Republican Brothers and Sisters for their warm embrace and to my assistant - one of their number - Shams al-Ma'arif Bakheit, for his good humour and invaluable insights.

The Sudan experience was prefaced by solid training in Sociology, African Studies, and Development Studies at Michigan State University. I would like to thank the Sociology Department for its support and the members of my guidance committee, Dr. Marilyn Aronoff, Dr. Craig Harris, and Dr. Christopher Vanderpool for their encouragement. Special thanks are offered to Dr. David Wiley, chair of my guidance committee and Director of the African Studies Center, for his work in building a unique environment in the United States for the serious student of Africa. My graduate work was supported in part by Foreign Language and Area Fellowships and my dissertation research was funded by a generous grant from the Fulbright-Hays Doctoral Dissertation

Research Abroad program. I would like to thank the Institute for African and Asian Studies at Khartoum University for its support of my research and particularly its director, Dr. Sayid Hurreiz.

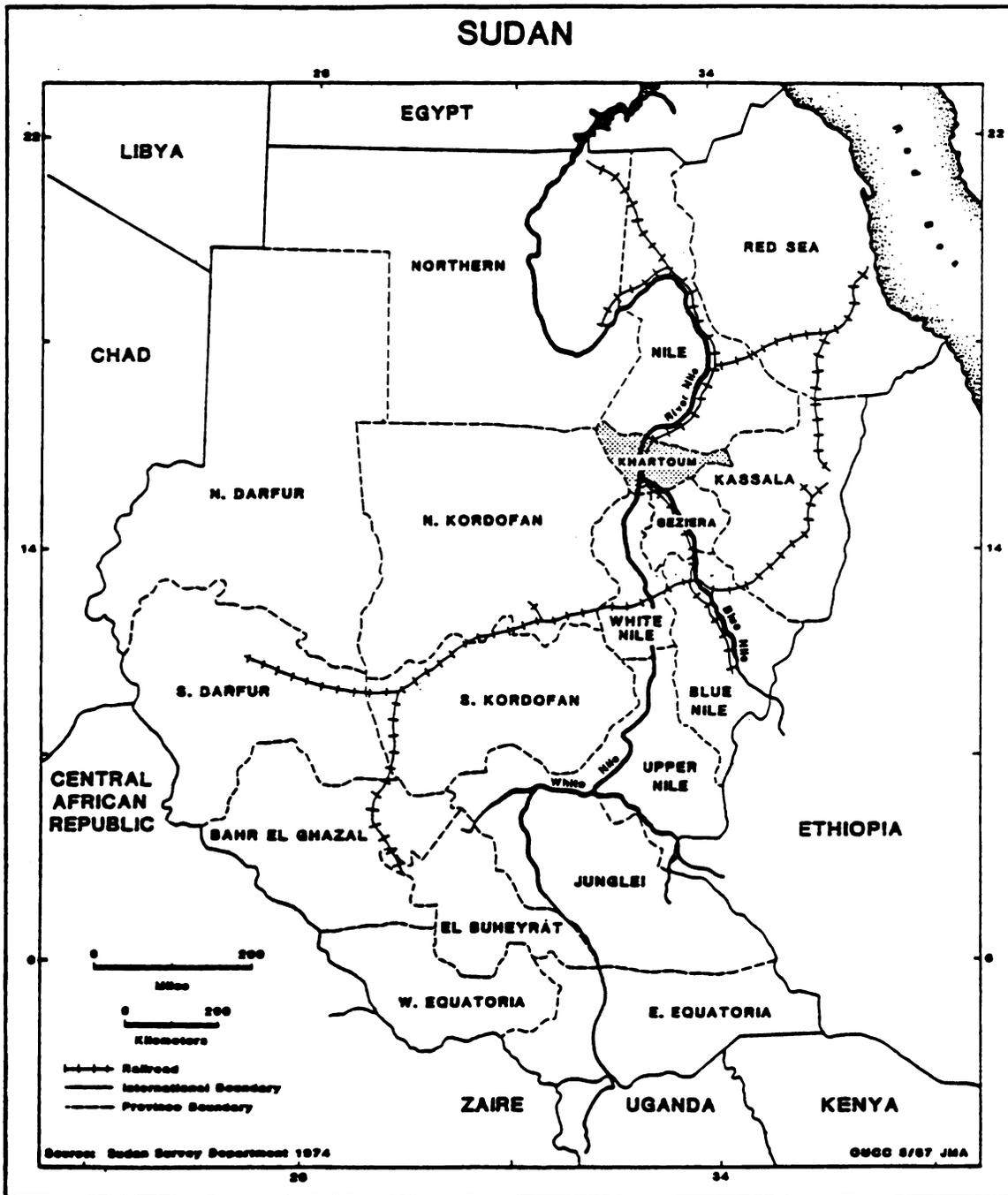
My understanding of Africa and Sudan is, to some extent, the product of vigorous and enjoyable interactions with a large number of good friends, African and American. I would particularly like to thank Dr. Jay Spaulding and Dr. Lidwien Kapteijns for their support at a crucial time and for their leadership in Sudan Studies. Dr. Susan Grabler offered strong support and advice during the field work period. The comments of my good friend and brother, Dr. Abdullahi Ahmad An-Na'im were also very helpful.

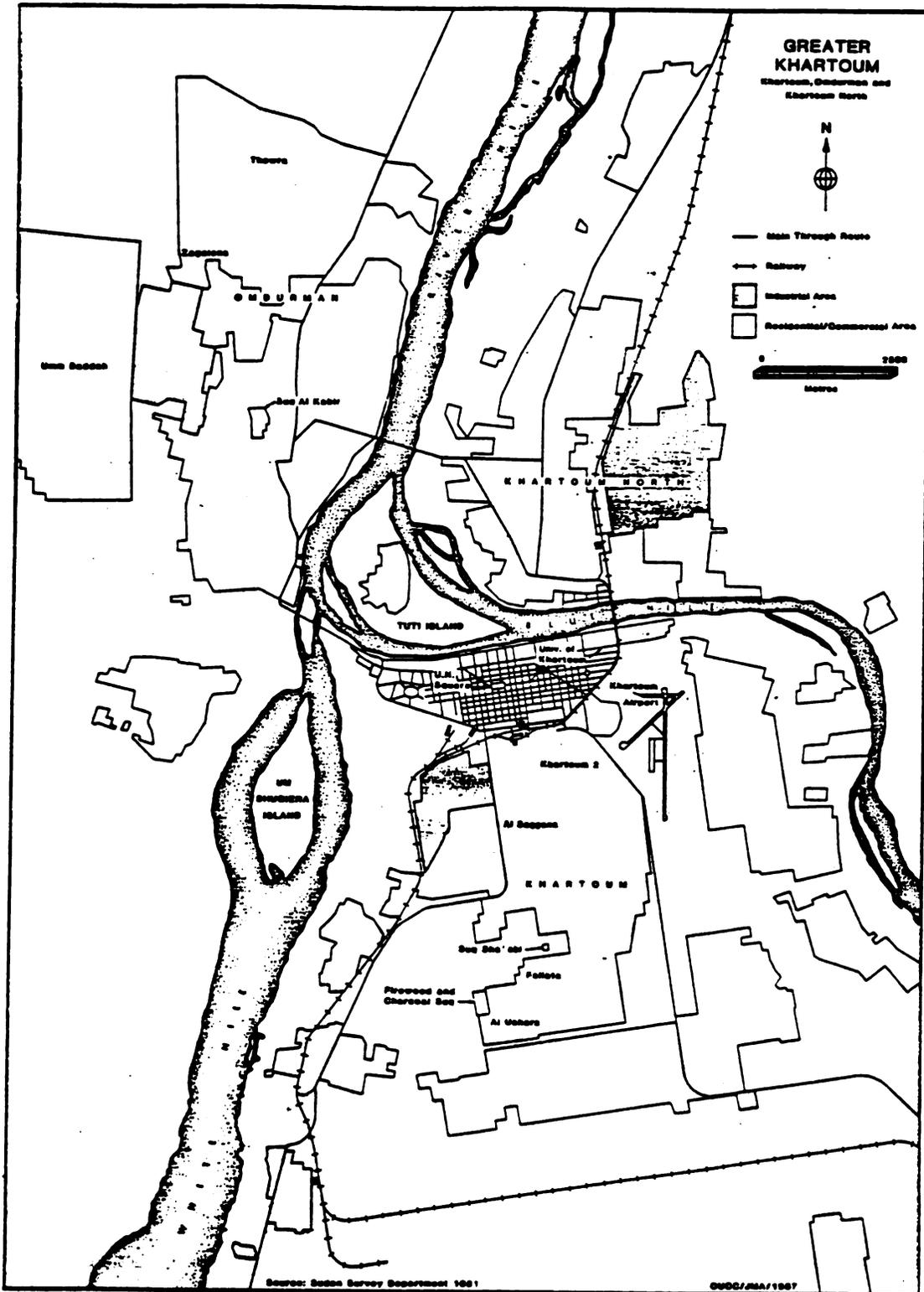
Finally, this work was completed while teaching international education and African Studies at Ohio University. I am grateful to my colleagues and students at that institution for their patience and support. The students in particular, have offered a never-ending stream of good ideas, keeping the circle yet unbroken.

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CHAPTER I

INTRODUCTION

The processes of commodity production and income generation in urban Africa are continually reshaped by society. Goods and services essential to modern life are produced by the complex interaction of diverse social elements: capital, labor, the state. Shortages of skilled labor power and resource constraints are among the most vexing problems that impede productivity in poor nations. This study describes an important part of commodity production in one African city, the small scale manufacturers of Khartoum, Sudan. Case studies of enterprises in the "informal sector," a social concept used to describe labor-intensive production that is the most dynamic aspect of Khartoum's economy, will be presented in order to disaggregate the highly heterogeneous informal sector and to analyze the strategies used by producers to manage their small workshops in the face of economic hardship.

The producers described here are part of the majority of the urban African labor force, representing those workers who forge their own jobs and provide work for others out of little capital and meager technology while the major economic resources of the society are invested in large scale industry. At the same time, processes of differentiation are taking place within this vast social construct, the so-called informal sector, enabling some producers to transform their businesses by relying increasingly on more capitalistic relations of production. These same processes are also creating new wage labor roles for the first time in types of production that formerly used family labor.

Urban Sudan

Africa is the world's least urbanized region but its cities are the world's fastest growing. In 1960 there were three African cities with populations of one million or more; today there are 28 (United Nations Center for Human Settlements, 1985). The rapid rate of growth of urban Africa - twice as fast as the growth rate of Africa's rural population - has placed tremendous burdens on the young governments of the continent. Unemployment and underemployment are thought to effect half of the people of the world, while the gap between rich and poor widens and is most obvious in the cities. Demands for housing, cheap food, and social services have overwhelmed most African states. Capital intensive and state-sponsored industrialization

schemes as a means to reduce poverty and to increase employment and national income in Africa have seen few successes. Thus we consider the roles of small scale manufacturing workshops as both employers and generators of income in the urban economy against a background of these severe development pressures.

The activities that this research describes are part of a long tradition of urban life. The Khartoum conurbation, consisting of Sudan's capital city, Khartoum, and the adjoining cities of Omdurman and Khartoum North, is located at the mogran, or confluence of the Niles. Human life has been supported at this site, where the White Nile joins the Blue Nile to form the River Nile, for millenia. In fact, the riverain Meroitic culture of Sudan, centered north of the mogran, was one of Africa's earliest civilizations. These "Three Towns" (al-mudun a-talat) form, by any measure, Sudan's primate city, because Khartoum, Omdurman, and Khartoum North have more than half of Sudan's urban population. The primate city phenomenon is an extreme of urban growth common to the ex-colonial Third World. In the case of Sudan this is particularly striking as the Three Towns are surrounded by a million square miles of rural hinterland.

The Three Towns are each functionally unique in Sudan and complement each other. Omdurman, described by a British engineer in 1910 as an "unhealthy rabbit warren" (Pons, forthcoming: 135), is the colonially-designated "native

quarter" or "old city," the capital of the 19th century nationalist-religious leader, Mohamed Ahmed al-Mahdi. The city is today a sprawling "suburb" of Khartoum with much of the area's working-class and squatter housing. As an important national center of commerce, Omdurman is home to some of Sudan's wealthiest families, including the present Prime Minister and great nephew of the Mahdi, Sadig al-Mahdi.

Khartoum, founded about 1820 as a military camp for the Egyptian viceroy, Mohamed Ali, on the site of a medieval Fung settlement (see Spaulding, 1985), is the seat of government and of the nation's two leading universities, Khartoum University and Cairo University's Khartoum Branch. The diplomatic and expatriate communities also live in Khartoum. Khartoum North is another important residential town and is the location of the area's largest factories.

The Three Towns are ringed by poor residential areas, neighborhoods that are not provided with basic services. Many of the Three Towns' largest marketplaces or "suq's" are in these fringe areas and provide space, usually illegally, for small scale production activities.

The Sudan National Census of 1983, the first national census since 1957, reported an unofficial population of 557,351 for Khartoum, 648,700 for Omdurman, and 341,146 for Khartoum North for a total of 1,802,299 for Khartoum Province (which includes the province's ex-urban "rural areas"). Khartoum Province represents about 10% of the total

Sudanese population of 20,564,364 (Sudan National Census, 1983). The World Bank's World Development Report (1986) states that Sudan's urban population as a percentage of total population has risen from 13% to 21% between 1965 and 1984. The 1973-84 period saw an average annual urban population growth of 5.5% (versus the 1.2% average of the industrialized economies and a 2.9% rate for rural Sudan). The United Nations Population Division Data Bank estimates that Khartoum (the Three Towns) will have a population of about seven million by the year 2025 at these rates of growth.

While the statistics above are focused on the growth of urban Sudan, they also describe an overwhelmingly rural and agrarian society. But Sudan's agriculture, based primarily in the subsistence sector with some investment in mechanized and irrigated production of sorghum, millet, and cotton, has seen a decline in productivity over the last 20 years, as well as a decline in agriculture's contribution to the country's gross domestic product. According to the World Bank (1986) agriculture's share of the GDP has declined from 54 to 33% in the 1965-84 period. Industry has only increased its share from nine to 16% in the same period, the remaining economic activities being subsumed under services, which have seen a large increase. The service sector, rather than industry, is where the contribution of "informal sector" activities are usually counted, if at all. The per capita gross national product for Sudan was calculated at \$360 for

1986. Based on the per capita GNP criterion, the World Bank places Sudan among the world's 30 poorest nations (World Bank, 1986)¹.

Industry in Sudan

Sudan, with its abundance of fertile soils and well-watered 2,000 mile Nile Valley, was touted in the 1970's as the future "bread basket of the Arab World." Droughts, famines, mismanagement, and lack of investment have all instead contributed to a state where Sudan is itself dependent on external food assistance. This dislocation in Sudanese agriculture has also contributed to some of the urban growth of recent years, with peasants moving to the cities in search of work or simply to find food. It should be noted at the same time that Sudan is at the center of a fragile region and is host to Africa's largest refugee population. Famines and wars in neighboring Ethiopia, Chad, Zaire, and Uganda have pushed more than one million people inside Sudan's borders during the last two decades at a time when Sudan itself has been suffering the ravages of war and famine.

The problems of agricultural development in this vast country have often been only of secondary importance to the succession of civilian and military governments that have ruled Sudan since independence in 1956. Sudan's colonial experience, the Anglo-Egyptian "Condominium" of 1899-1956 did focus on exploiting the land's potential for cotton production. The Gezira Scheme, arguably the Third World's

first large scale agricultural project, was a system of dams and irrigation canals built by British commercial interests in the 1920's and '30's to water the rich clay soils that lay between the White and Blue Niles. Tenant and migrant laborers were essential to this scheme's low cost of cotton production for the mills of Lancaster.

The post-colonial Third World has often turned to a policy of industrialization as an "engine of growth" to pull away from pressing development problems. Industries have been established either to earn capital for further agricultural investment or to serve as the primary vehicle of economic expansion. Sudan, with its widely scattered and rural, uneducated labor force, concentrated its industrial plans in the area of processing of agricultural products: vegetable canning, textiles, refining of sugar cane, and tanning of hides. Following the lead of Sudan's traditional partner, Egypt, the Nimeiry regime instituted a policy of al-infatah ("opening") to foreign industrial investment in the early 1970's. The resulting laws tended to relax import duties on heavy industrial equipment in the hopes of attracting investment from the newly-wealthy and nearby oil-producing states.

In terms of putting Sudan on the road to large scale industrial development the infatah policy was largely a failure. Only a very small amount of the surplus capital of the Arab members of OPEC was invested in Sudan. These investors bought property in Europe and North America or

engaged in ambitious industrialization projects at home. Sudan did benefit from the latter activity however, with thousands of Sudanese finding work in Libya, Saudi Arabia, and the Gulf. The earnings of these laborers were returned to Sudan as consumer goods or, to a lesser extent, as investment in small businesses.

The industries that have been established in urban Sudan during the last two decades have done little to alleviate the growing disparities between rich and poor in the country. The state-owned textile factories, once a leading Sudanese industry located in Khartoum North, have largely closed during the 1980's due to mismanagement and the low-cost of foreign imports. Privately-owned factories that manufacture commodities important to a large number of Sudanese consumers, such as cigarettes, batteries, and sweets, offer employment to only a small number of workers, but do serve to strengthen the small group of large-scale, capitalist entrepreneurs, Sudan's bourgeoisie. This group, in turn, has played a significant role in supporting the succession of post-independence regimes in Sudan.

But even the bourgeoisie has been severely affected by the inflation, shortage of foreign exchange, and exodus of skilled workers that has accompanied Sudan's large-scale development projects. At the same time the Nimeiry regime (1969-1985) increased its investment in military hardware while the nation's poor majority suffered. The discovery of recoverable oil reserves in the Southern Region was hoped to

begin to solve Sudan's financial problems but the continuing war in the South, the present world-wide oil-surplus and the distance of the reserves from Sudan's Red Sea ports have largely eroded these hopes.

The Urban Informal Sector

To a limited extent, the existence of the urban informal sector in Sudan is the result of large-scale industry's inability to provide jobs, products, and services. The term "informal sector" itself arose as an explanation of the perceived relative ease with which entrepreneurs could establish petty businesses. Such entrepreneurs have taken the opportunity presented by stagnating or non-existent industry to begin or expand small scale production, in some cases using capital earned abroad for this purpose.

But if we look carefully at the spectrum of activities in Khartoum's "informal sector" we see that these small businesses are not all the result of failed industrialization or remnants of rural crafts. Some activities, like the vending of Pepsi from mobile vans or automobile repair and panel beating can hardly be called "traditional" occupations because they have existed in Sudan for only one or two generations. Other urban trades, such as carpentry, boat building, or metalworking, do have traditional roots in Sudan, and their continued small scale has been the most efficient way to deliver the particular product or skill in a poor and sparsely settled country.

What most forms of urban small scale production do have in common however, is their reliance on material inputs from foreign or domestic large scale industry while largely retaining non-capitalistic social relations of production.

The changing patterns of those social relations, particularly as observed during my field work - December, 1981 to November, 1983 - and supported by oral and documentary evidence, are the major foci of this study. Small scale metalworking, carpentry, and tailoring firms were selected for study because of the relative complexity of these types of informal sector production, with most firms having at least one worker in addition to the entrepreneur. These trades are also among the most common types of urban small scale industries throughout the Third World, providing basic furniture and clothing for the urban household. It is the burgeoning demand for the important products of these trades that has fueled the process of change in their relations of production.

Theoretical Background

The sociology of development is the broad field which informs this study. Economics and anthropology have contributed both research topics and methods to this field with the growth and distribution of income being of major interest to economists and an understanding of the diversity of Third World peoples guiding the work of anthropologists. With its central concern for a vast and complex portion of the world's population, the sociology of development is,

perhaps, more hospitable to data from other disciplines than most other branches of sociology. But the sociological theories do prevail, generally explaining social behavior in light of one of two competing perspectives, which are briefly characterized as follows. The first, modernization theory, gives a conventional view of societies evolving in a more or less unilinear direction, changing internally toward patterns of Western industrialized societies. Social indicators such as income, literacy, and access to health care track the progress of the newly independent nations towards standards set by international agencies such as the United Nations. The second set of theories takes a radical view of the world, seeing it as an historical system with its parts in inevitable conflict. The radical theorists use Marxist analysis to describe the expansion of capital from its European center to peripheral Africa, Asia, and Latin America as it creates and establishes varying degrees of political and socio-economic dependency with regions of the world.

Applying these theoretical perspectives to the specific area of urban small scale industrial development, we also find two streams of thought. The liberal or modernization view looks at small scale industries as a potential but troubled solution to the employment and income problems in Third World cities and/or as the basis for industrial development. In contrast, the radical stance sees these industries as the result of dependent development, creating

and transforming a mode of production that is subordinate to world and local capital, trapping its workers in poverty and leaving them with few opportunities to succeed to truly independent entrepreneurship.

A perspective that is missing from this intellectual battlefield is neatly summarized by John Iliffe (1983) who, after reviewing the growing literature on this formerly neglected topic, poses the question, how do these businessmen see themselves? The tendency for both scholars and planners has been to aggregate these small producers into vast social formations such as the "informal sector," a residual concept describing everything not included in large-scale industry, or "petty commodity production," described as a subordinate mode populated by the exploited, non-capitalistic producers in the capitalist economy. Presenting an alternative to these views, this study discovers that these producers are actually a highly heterogeneous and dynamic group: some self-employed and increasingly successful, some earning wages, some drifting between these two states. But all are constantly devising new strategies to generate income for themselves and their presented in this study is a view from the "bottom-up," trying to understand the importance of small scale production to those who support themselves by it. The producers are portrayed less as victims of a world capitalist system beyond their control and more as significant actors in the urban Third World economy.

The Present Study

An enormous variety of goods and services are provided by the economic activities of the urban informal sector, from snacks to housing construction. Three "skilled trades" - tailoring, carpentry and metalworking - have been selected for study out of this array of activities because of their predominance among small manufacturers and their particular patterns of manufacturing. Steel (1979) points to surveys from across Africa which identify small scale clothing and furniture construction as the two most important types of urban enterprises. Other important small scale industries, such as auto repair, housing construction, or shoe-making, were not selected for this study because a manufactured item was not produced by the activity, or the workers were too peripatetic, or the industry was insufficiently complex, i.e., having only one self-employed worker.

Tailors, carpenters, and metalworkers produce essential commodities for the urban and national communities and have relatively complex means of organizing their production, many entrepreneurs now employing some type of wage labor if they are not essentially wage laborers themselves. In order to engage in the manufacturing process they must also establish varied and extensive links with other sectors of both the national and world economic systems. Most of the raw materials inputs of these enterprises are imported products and their output is purchased by many different income levels of Sudanese society in addition to the urban

poor. Also, the necessary equipment costs tend to make entrance to all three trades relatively prohibitive. The social science literature on small scale enterprise has repeatedly called for more data on all of these factors, which are clearly illustrated with the examples from urban Sudan.

The first case study is of tailoring, one of the most ubiquitous types of urban Third World manufacturing. In Sudan, a country with virtually no mass-produced clothing establishments, tailors make men's and women's Western-style clothing as well as the traditional dress of Sudan. While tailoring is the least complex of the three forms of manufacturing presented in this study - based on its labor requirements and skill that is relatively easy to acquire - it is also the point on the informal sector continuum undergoing the most dramatic transformation. More and more tailors are unable to establish themselves as independent entrepreneurs and are instead working for wages in small ready-made clothing shops, where customers may purchase finished clothing instead of purchasing cloth and taking it to a tailor for custom fitting, as was the norm. Over the short term that this "ready-made" phenomenon has existed or been observed both product price and quality have been reduced.

The transformation from made-to-order production dominated by one-man tailoring operations to ready-made production is a measured response to an increase in the

availability of capital among a few entrepreneurs. This transformation is also related to the growing demand for quickly made garments which are an increasingly important part of the urbanite's wardrobe. It is not so much the magnitude of this phenomenon which is the focus of interest here: one-man tailoring businesses continue to predominate in the trade. Rather, the importance of this topic is confirmed by the attention given by all members of this trade to the potential that ready-made production seems to represent. Most tailors indicated that they believe ready-made production to be a modern and positive development in their industry.

I witnessed a similar transformation taking place in the carpentry and metalworking trades, the subjects of the second and third case studies, although to a much less dramatic extent than in tailoring. Carpentry and metalworking are more complex trades, requiring advanced skills, a greater variety of equipment, and more capital than tailoring, requirements which make the pace of change in these two trades relatively slow. Nevertheless, the ready-made furniture business is becoming an important part of small scale carpenters and metalworkers' production and has even generated a small retailing sector in these trades.

Carpenters and metalworkers are also involved in urban housing construction. Sub-contracting of different aspects of a house building project is becoming an important activity for these trades, creating new employment and new

labor relationships. The prevalence of wage laborers in these trades, as opposed to apprentices who might succeed to independent entrepreneurship, is a major focus of these two case studies.

Organization of the Analysis and Research Methods

The three case studies themselves are each divided into four major sections - management/entrepreneurship, employment, training/apprenticeship, and spatial concerns/relations with the state - in order to examine each trade in great detail. The first section, on management, describes the strategies used by tailors, carpenters, and metalworkers to organize their production. The management function includes the processes of obtaining capital, labor, and raw materials, and making production and marketing decisions. The variety of strategies employed by those working in the "informal sector" belies any notion of social homogeneity among these small scale producers.

The employment section of each case study focuses on the growing importance of wage labor in these trades and the differentiation that exists among those employed for wages. The training/apprenticeship sections, while directly related to the employment issue, also describe the difficulties faced by those seeking training in these trades today. The highly competitive nature of informal sector entrepreneurship has weakened the more comfortable and paternalistic master-apprentice relations of the past. The description of changes in the apprenticeship system responds

to a global concern for youth employment, skill training, and labor power development.

The fourth section of each case study concerns spatial arrangements and relations with the state and addresses the importance of space to small scale producers in crowded Khartoum. The distribution of urban land is under the control of the state, both directly through the agencies of local government and indirectly through state-controlled trade associations. The issue of space is actually very close to that of power in the urban economy. Virtually all small scale producers interviewed for this study complain that their production is constrained by the unavailability of space for expansion. In many cases the need for space is very modest, but the state restricts access to space in order to control the threat of what it perceives to be an "unruly" and "disorganized" form of production. The state/spatial discussion also places the three trades in their wider societal context, moving beyond the internal dynamics of production that are the focus of much of the study.

The four sections in each case study are designed to contribute to the social disaggregation of small scale production. In this regard, "management" indicates that there is differentiation even within the group of entrepreneurs, with one's ability to accumulate capital dependent on his access to a variety of social resources. The "employment" and "apprenticeship" sections designate

groups other than the owners of the means of production. Finally, the last section of each case study describes the state's performance in this system, dominating the production described in the other three sections.

The data collection process for this study was primarily qualitative in nature in order to establish first a sense of the day-to-day patterns of life for small scale producers. In essence, the resulting case studies are ethnographies of important urban trades, serving to disaggregate the complex social formation that has become known as the informal sector. The extensive participant observer data are supported by a short survey of approximately 200 producers and apprentices as well as documentary evidence from Sudan's Central Records Office and the Sudan Library of Khartoum University. The survey followed the participant observation phase of the study and was derived from the open-ended interviews conducted with tailor, carpenter, and metalworker informants.

The next chapter presents a review of the social science literature that frames this study, contributing theoretical and historical perspectives to the specific and complex field of the organization of small scale industries in urban Sudan. Chapter Three, "The Research Experience," is a detailed explanation of the methodology of this study. The following three chapters are the case studies that form the core of this research. A concluding chapter summarizes the major findings of the study and raises some implications

for policy and future research in this area of urban development.

In the course of this discussion - an attempt to add Khartoum to the growing literature on work and small scale production in Third World cities - we will observe men at work in Khartoum, striving to maintain the dignity and craftsmanship of their trades in the face of the pressures of the development process. We will also turn to the efforts made by workers on behalf of justice and equity in the workplace, and to the pursuit of individual self-reliance that is represented by the creative strategies of small scale entrepreneurs and by the youths who struggle to succeed them.

NOTES

1. The currency of the Republic of Sudan is the Sudanese Pound (LS). At the time of this research, December, 1981 to November, 1983, the Sudanese Pound was exchanged at the rate of approximately 2.50 LS to \$1.00 (US).

CHAPTER II

THEORETICAL PERSPECTIVES

The study of the organization of small scale industries in Sudan's urban economy and the accordant process of change are framed by two major streams in the literature of the sociology of development. The modernization and dependency/political economy schools each provide a comprehensive theoretical background to the debate on the conceptualization of small scale industries in African development and on whether they are to be analyzed as an "informal sector" or as "petty commodity production." These two perspectives, emerging from different ideological roots, are essentially in conflict. But when they are used to support an examination of the unit of analysis of this research - the skilled craftsman's workshop - it is clear that both perspectives illuminate significant parts of the problem. This chapter will review selected works which have informed this study.

An equivocal approach is adopted here because the

arguments of the two principle perspectives seem to be inconclusive as to the direction of Third World development. The sociology of development appears to be at what Booth (1985) refers to as an "impasse," as current theory and empirical work in the field are not supplying satisfying explanations of an increasingly complex world. The 1980's have seen the publication of articles with titles such as "Is dependency dead?" (Godfrey, 1980) while the modernization perspective continues to be the strongest influence in international development assistance agencies. The debate pits those theories which - explicitly or implicitly - adopt a "dualistic" approach to the analysis of Third World social structure, against those which view most social processes in the Third World as having been changed by the increasing penetration of the industrial capitalist and former colonial powers into these regions.

The sociological significance of this discussion lies in the key issues of urbanization, work, and employment. The synthesis of the burgeoning literature on work in Third World cities provides clues to the divergence and convergence of Third World urbanization patterns from and with those patterns in the industrialized West. This specific comparison is beyond the scope of this study because the cities of Africa, the world's fastest growing, present a diverse enough field of inquiry to warrant the undiluted attention of sociologists. The present study is an attempt to add an understanding of small scale industry in

greater Khartoum to the field of African urban studies.

Modernization and Dependency

The winds of change that signaled the major de-colonization processes following World War II were accompanied by a re-evaluation of the theoretical perspectives on social change in Latin America, Africa, and Asia. Early development theories had been grounded in economics with Rostow's 1960 book, The Stages of Economic Growth: A Non-communist Manifesto, also serving, as the title indicates, a political purpose. In Rostow's scheme all societies moved from "traditional" to "modern" states by concentrating savings and investment, following the advanced capitalist United States as a model. Another important modernization theorist, Black (1966), is able to rank all the world's nations in the order of their level of "development."

The transformation from traditional to modern society was the focus of the sociological literature of this period as well. Wilbert Moore (cited in Long, 1977: p.9) said that,

"The concept of modernization denotes a 'total transformation of a traditional or pre-modern society into the types of technology and associated social organization that characterizes the 'advanced' economically prosperous and relatively politically stable nations of the Western world.'"

Much of the work in modernization theory concentrated

on describing the two extremes of the spectrum, traditional and modern societies. Theorists explained the sluggish and unchanging economies of the former by pointing to their lack of the attributes of the latter without clearly analyzing the process that leads from one type of state system to the other. Hoselitz, for example (1960), uses Parsonian pattern variables to contrast "particularistic" traditional societies with individuals relating to each other on the basis of "ascribed" characteristics, while "universalistic" modern societies were marked by their "achievement" orientation. Industrialization, in this view, is seen as the principle means by which traditional variables are eliminated within the existing political structure. Capital grows through the vehicle of industrialization and, in principle, "trickles down" to the more disadvantaged groups in society.

The modernization approach does continue to influence the field of development studies, notably through the journal which Hoselitz founded, Economic Development and Cultural Change. The contribution of a concern for specific cultural processes in development stands out against the lack of attention to these important details in the more radical theories.

Dependency theory offers a competing explanation to the modernization perspective for the causes of continued poverty in the post-colonial Third World. This approach posits that under the present structural conditions of the

world political economy there is unlikely to be a transformation from a state of traditional "underdevelopment" to one of modern "development." Rather, the state of underdevelopment is one that has been reached through the exploitation of the colonial territory by its colonial ruler and other industrialized economies. The former colony remains linked to European and North American "metropolises" as a dependent "satellite" (Frank, 1972).

Dependency theory, in many respects, is a Third World response to the modernization paradigm. The long, historical link between European and North American capital and Latin America appeared to some Latin American social scientists to be only promoting "development" in the North. The writings of Sunkel (1969), Dos Santos (1970), Cardoso and Faletto (1979), and Stavenhagen (1975) provided the foundation for this view, at once indigenous and non-ethnocentric in comparison with modernization theory. The German-American sociologist, Andre Gunder Frank, helped to shape the now widely-recognized models of dependency theory, with the vivid image of a capitalist "center" economy expropriating the surplus of a Third World "peripheral" territory. The dependency argument is thus a relational one:

"...historical research demonstrates that contemporary underdevelopment is in large part the historical product of past and continuing economic and other relations between the underdeveloped satellite and the now developed metropolitan countries" (Frank, 1972, p. 3).

Other generalizations drawn from the dependency

perspective are summarized by Blomstrom and Hettne (1984, p. 6):

"Development and underdevelopment are different aspects of the same universal process.

"Underdevelopment cannot be considered as the original condition in an evolutionary process.

"Dependency is, however, not only an external phenomenon but is also manifested in different ways in the internal (social, ideological, and political) structure."

Overcoming the imbalance of dependent relations, in this view, can only come from radical change in the social structure. The complete redistribution of assets between dominant and subordinate elements of society must occur in order to ensure equality (Moser, 1978). The debate surrounding these theories has been a spirited one with the "dependentistas" - the original Latin American dependency theorists - responding to criticisms from both the Left and the Right and modifying their work over the last 15 years. Of particular interest has been the success of capitalist development in a number of "peripheral" areas, notably Brazil, Singapore, and South Korea, along with some of the oil producing/exporting states. The debate has moved beyond the "stagnationist" stigma of dependency theory, i.e. that the theory allows for little change in the peripheral zones, to a more careful consideration of the limits of capitalist development and the role of internal as well as external variables in the subordination of some social classes in the Third World (Godfrey, 1980; Bienefeld, 1980).

An impressive and dramatic attempt at a more

comprehensive analysis has emerged with Wallerstein's "world system" studies (1974, 1980). In this historical view, he describes the gradual incorporation of every region of the world into the capitalist economy, moving toward a single world division of labor. Wallerstein has been criticized by Brenner (1979) for failing to "transcend economic determinism" in his model. Brenner says that underdevelopment as an automatic result of incorporation into the world economy is an abstract notion without total empirical validity.

These "grand theories," modernization and dependency, provide a large picture of social processes in the modern world. However, in their empirical application these theories are somewhat lacking. It is often difficult for the sociological field worker to see their validity in the context of everyday life. In order to refine my theoretical approach I will now turn to a review of the less-sweeping literature that informs a study of small scale industries in urban Sudan. This body of work certainly has roots in the theories described above; however, the theories are refined, adapted, and, at times, rejected as complex and regionally-specific social problems are brought to bear in the course of the debate.

African Studies

Africa presents a special case for development theorists. It is the second largest of continents and the

poorest of continents. Africa was the last continent to be incorporated into the world economy although at this point there are few, if any, corners of the continent left untouched by that system. There are many wide social gaps between African conditions and the rest of the world, especially in terms of income, infant mortality, general health standards, rates of schooling, percentages of population in urban areas. And yet, we are generalizing about 53 nations and a half billion people, a significant portion of human society.

The academics studying Africa have sought to explain the causes of the conditions of this special case, primarily focusing on the overwhelmingly rural and agrarian characteristics of African societies. It is, therefore, important to review a selection of the literature on urban life, class, and work in Africa, the aspects of Africa that frame the present study. The current crises in the sociology of development (Brenner, 1979; Booth, 1985) make imperative an exploration of a social science based on the African experience. An increasingly complex world makes universalistic explanations of social behaviour less appealing.

1. Capital and Class in Africa

The rise in interest in social classes in Africa and the role of capital in establishing those classes signals a

turn away from the early modern picture of an undifferentiated continent. The earliest picture, however, that of the medieval North African social scientist Ibn Khaldun began a long tradition of tracing the origins of class in parts of Africa to the surplus derived by commercial agents from long-distance trade between the cities immediately south of the Sahara (el-Kodsy, 1970). It was significant that Ibn Khaldun, despite his experiences in peasant Egypt, looked beyond rural masses for his notions of the role of merchant capital in class formation, as rural producers became the primary focus of the class debate in African Studies.

Coquery-Vidrovitch (1976) and Amin (1977) have both given credit in recent years to control over long-distance trade as signalling the rise of class in pre-colonial Africa. Coquery-Vidrovitch uses such trade as part of her attempt to distinguish an,

"...African mode of production which is based upon the combination of patriarchal-communal economy and the exclusive ascendancy of one group over long-distance trade" (1976, p. 85).

Other efforts to document the rise of class in pre-colonial Africa include those of Walter Rodney (1972), who relates the phenomenon to African participation in slave-trading, and Ehrensaft (1977), who identifies the commercial activities of freed slaves in West Africa as blending with the pre-imperial rumblings of the British in

the region to foster the development of classes.

Scholarship on the rise of class in colonial Africa tends to converge with that literature on post-colonial Africa as these two periods are less distinguishable from each other than are the pre-colonial and colonial periods. Iliffe (1983, p. 45) discusses Christian evangelizing that accompanied colonial incursions into Africa, with the preachers taking as their mission converting the natives to capitalism as well as to Christianity:

"(the missionaries) believed that they must convert Africans to capitalist values, but in fact many of the values they sought to inculcate were already widely shared by Africans."

The areas of focus in class-oriented African studies have largely been determined by the ideological perspective of the writer. The modernization perspective has focused on "modernizing elites" as innovators who promote change from within the society (Lerner, 1964). The academic left has written about the role of trade unions in African class formation (Sandbrook and Cohen, 1975), and the rise of an African proletariat (Gutkind, 1974). Radical writers like Fanon (1963) have considered the revolutionary potential of the peasant masses.

The Sandbrook and Cohen volume (1975) on the development of an African working class is significant in that the emphasis is on the uncompleted process. This is a collection of case studies from the late colonial and early

independence periods showing how the establishment of factories and the colonial construction of infrastructure (roads and railroads), contributed to and, in some cases, created a working class out of rural producers. Forced labor and taxation were among the means used to "encourage" these workers but the colonial period also introduced a need for cash which was met through wage work.

Gutkind (1974, p. 36) cites Hobsbawm in identifying class in Africa, stating that,

"class in the full sense comes into existence at the historical moment when classes begin to acquire consciousness of themselves as such."

When we turn to the small scale producers of Sudan, the case studies that form the core of this research, we find a still very fluid class situation. Small protests and acts of defiance on the part of producers - detailed in the case studies - are aimed at the state which is seen as controlling some aspects of production. Such acts are reminiscent of protests and disruptions of work which van Onselen (1979) describes as indicating the growth of class consciousness among the black mineworkers of Rhodesia. However, Williams (1977), investigating small scale producers in Nigeria similar to those I studied in Sudan, contends that such producers cannot generate a radical movement for change on their own and thus do not constitute a class. They may, however, provide followers for such a movement, in his view.

What is certain about small scale producers in urban Sudan is that we are not examining the introduction of capitalism to the sector. The urban area has long been dominated by capitalist relations, intensified by Sudan's colonial experience in developing cash crops for export. Omer (1985, p. 9) suggests that,

"...capital accumulation took root in the circulation sphere as early as the history of trade in the area suggests."

C. Collins (1976), O'Brien (1981), and Khalafalla (1982) state that capitalist relations were an integral part of Sudan's political economy long before the advent of European colonialism in 1897. It could be that the sixty years of colonial domination disrupted this earlier growth of capitalist relations because the Sudanese state, both prior to and post-independence, took primary responsibility for the control of capital in the country. R. Collins (1975) says that the first capital provided to many members of the post-independence commercial bourgeoisie often was the lump sum government pension payments made to former employees.

According to Mirghani (1980), the development of large scale industry in Sudan has been the nearly exclusive province of the state. The state-sponsored specialized "development banks" function in concert with the industries to control access to capital in that the banks' meagre resources are divided among already established commercial interests. The new wave of private "Islamic" banking, with

initial capital from the wealthy oil-producing states, makes Khartoum an international center for capital to which the average Sudanese has little access.

Generalizing about Africa, Katz (1980) would view such evidence as calling into question the very existence of a bourgeoisie in Sudan. To what extent, he asks, does this "bourgeoisie" control capital? He also suggests that classes do not rest on economic criteria alone and would agree with Mahmoud (1984) that ethnic, ideological, and political factors also contribute to class development in Africa. While the "Sudanese bourgeoisie" of which Mahmoud writes has far more money and power than the producers who are the subjects of the present study, she does help to place the tailors, carpenters, and metalworkers in their proper context. The laboring poor, a group that more closely represents these latter producers, is seen by Sandbrook (1982) as rarely constituting a "disaffected, solidaristic group" (p. 173). The petty bourgeois and individualistic aspirations of this group, together with religious and ethnic loyalties in the case of Sudan, combine to prevent strong class identification. The working conditions of these people, in the face of the glaring inequalities of the urban setting, is more likely to produce the "we-they mentality commonly known as populism" (Sandbrook, 1982, p. 173).

Another important context for the class and capital issue is the Islamic setting of this study. Khartoum and the northern part of Sudan in which the city is located, are

overwhelmingly Muslim culture areas. Because Islam is a way of life as well as a religion, we should consider Rodinson's (1978) comment,

"The Muslim religion has influenced significantly neither the structure nor the functioning of the capitalist sector in the countries of Islam " (p. 168).

Nevertheless, the importance of religion as a social equalizer in the lives of the small scale producers and workers of Khartoum was widely observable and is reported in my case studies. Rodinson also states that it was early colonial penetration and not so-called "Islamic backwardness" that hindered "native enterprise" in the Muslim cultural region.

2. Urban Africa

A need to recognize the individual men and women who have actually built Africa's cities and provide goods and services to urban dwellers may be identified in the recent literature on urban Africa (Bromley and Gerry, 1979; Peace, 1979; Cooper, 1983; King, 1977). This trend, however, is only a part of the larger literature on the cities of Africa which places cities squarely in the context of the capital and class debate described above. Africa's largest cities, primarily located on the coasts, are seen as "outposts of monopoly capitalism" (Seidman and Makgetla, 1980), the product of colonial-era needs of ports in the

extraction of Africa's wealth, and continue to serve this function. An earlier body of social science literature recognized those who peopled the cities, focusing on rural to urban migration as an isolatable phenomenon. But this latter literature too, may be seen as part of the discussion of class, because the unequal distribution of resources between rural and urban areas - potentially leading to changes in relations of production - is of primary concern in the migration literature.

Before turning to a review of a selection of works which illustrate these trends, it is important to mention one stream of the urban literature in which Khartoum is sometimes found. The "Islamic city" literature describes a set of unchanging, traditional, autonomous zones across Northern Africa and the Near East, which uniquely function under supposed principles of Islamic commerce and social norms. Kuhn (1970) describes Khartoum, or more specifically, Omdurman, as the "classic model of the Islamic pre-industrial city" (p. 142). Ironically, the activities described by Kuhn as fitting into this model make great use of imported and recycled materials, which indicates the producers' dependence on the non-Islamic and external world. This literature does relate to an approach found in some of the classics of sub-Saharan urban studies such as Mitchell's Kalela Dance (1956) or Plotnicov's Strangers to the City (1967). These works focus on the role of traditional (i.e. "rural") values in maintaining equilibrium or stability in

the otherwise jarring urban setting. While such studies have been criticized as "exotic" or condescending, Cooper (1983) sees their value in that the early studies helped to identify what Africans were doing themselves, apart from the effect colonialism may have had on them.

A vivid awareness of rural problems in the shaping of the urban also emerges in the migration literature. The determinants of what is to become an urban population, according to this research, lie largely in the disparities between urban and rural living conditions (Gugler and Flanagan, 1978; Renaud, 1981). People move to towns primarily in search of higher incomes and better living conditions (Todaro, 1976). Wallerstein (1965), whose migration work focused on international migration in West Africa, emphasized the changes that occur in both sending and receiving communities as a result of the migrant's move.

In the case of Sudan, Lees and Brooks (1977) add the role of education to the migrant's decision-making process: those with more education are more likely to move to Khartoum. These authors also consider the trans-Saharan trip made by West Africans on the pilgrimage to Mecca as contributing to Khartoum's population, certainly a factor in the Fellata neighborhood described in this study (see Chapter Five). Oberai (1977) uses the Comprehensive Employment Strategy Mission survey of 1973 to show that there were adequate numbers of jobs in the Khartoum area for rural migrants at that time.

Urban Sudan itself (the "Three Towns") is treated as a dynamic, changing entity by Lobban (1984), Mirghani (1980), Yousif (1983), and El-Bushra (1972). They are concerned with the inequalities emerging within the urban area itself with Mirghani (1980) stating that income inequality is higher in Khartoum Province than anywhere else in the country. El-Bushra (1972) adds that despite the high concentration of social and economic services in the Three Towns, access to these services is poorly distributed among urbanites.

Cooper (1983) and Sandbrook (1982) express concern for the "unspeakably grim" aspects of African urban life, the poor housing, inadequate sanitation, high levels of unemployment that face most urbanites. Castells (1977) would point to the dependent nature of Third World urbanization, seeing it as the result of industrialization not in the Third World cities but in the advanced capitalist countries, thus impeding any control the African economies may have of this process themselves. Cooper (1983) is less sure that such external processes set the definition of what is "urban" in Africa and sees room for an expanded conception which includes a concern for space utilization strategies in Africa's cities. The spatial aspects of small scale production in Khartoum are described in the present study as playing a major role in the development of this sector.

3. Work and Workers in Africa

The processes of class formation, capitalization, and urbanization are inter-related and large scale or mass concepts that indicate general trends in African society but tell us little about what is happening to the individual. The literature on work and workers in Africa comes closer to the purpose of my research, a theme of which is aptly set by Geertz (1968, p. 4),

"We hope to find in the little what eludes us in the large, to stumble upon general truths while sorting through special cases."

The methodological aspects of the development of a perspective for this study are detailed in the next chapter. In this section I will review material that emphasizes the individual's participation through work in the urban African development process.

The studies of workers in Africa serve, in a sense, to surround the present study in that much of the earlier research has either focused on workers in large scale factory industry (Peace, 1979; Sandbrook and Cohen, 1975), or on those struggling to find any kind of employment in the city (Gutkind, 1967, Gutkind, 1974; Sandbrook and Arn, 1977). There is a compatible literature on the small scale producers of the "informal sector" that will be described in the next section, but with the exception of Bromley and

Gerry (1979), it has not attempted to locate such workers in the wider urban context of class relations.

Peace (1979) emphasizes the strategies Nigerian factory workers devise to improve their income earning abilities, with examples in finding second jobs or sending their wives into the labor force. Gutkind (1967, 1974) also describes the strategies, culled from newspaper accounts, of unemployed workers to survive in the city and begin to identify with each other's problems. Gutkind (1974) is concerned that the work situation not be separated from other important aspects of the worker's life:

"The social field in which the urbanite operates is a large one defined by the work situation, and even more so by his search for employment, the neighborhood in which he lives, his participation in political activities and his search for relaxation (p. 160)".

Moser (1978) effectively links all of these urban activities - from wage work to unemployment - referring to a "continuum of productive relations." The differences in strategies and living standards between urban workers are subtle and do not represent a necessarily permanent hierarchy of work.

A concern has been expressed in the literature on urban workers that, in comparison with rural farmers, the former present a "labor aristocracy" (Arrighi and Saul, 1968, p. 143). The wage workers, with their union representation, benefits, and "high wages" were seen as an elite within the

national society. However, Hinchliffe (1974), in his work on northern Nigeria, has shown that most urban workers have miserable living conditions, inadequate access to social services, and low wages, hardly presenting an "elite." The great instability of large scale industry in Sudan makes this point particularly clear; factory workers are barely better off than small scale producers and often drift between the two conditions. A minimum wage of 16.5 LS per month was set for the first time in 1976 for workers in establishments with more than 10 employees (Government of Sudan, 1979). This law has had no effect on the small, informal sector businesses, which are thought to provide employment for more than 30% of Khartoum's labor force (ILO, 1976). At an earlier point in Sudanese history, in the railhead town of Atbara, for example, the decent housing and working/union conditions provided for railwaymen may have exacerbated national inequalities (Holt and Daly, 1980). The depressed state of industry in Sudan today, however, offers few privileges to the urban wage worker.

We must turn to economics for a picture of the Sudanese labor market. El-Bagir et. al. (1984) classifies all types of urban economic activities in Sudan as either "declining" or "stagnating" with the exception of the informal sector activities which are said to be expanding. Kannappan (1977) and Oberai (1977) describe the urban labor market as very small in relation to the rest of the nation's economy. Most of this type of research relies on the International Labor

Organization's Comprehensive Employment Strategy Mission data of 1973. Birks and Sinclair (1980) add an important element in their discussion of the migration of skilled labor (mechanics, carpenters, electricians) from Sudan to the wealthy oil-exporting nations of the region. The numbers of skilled migrants increased dramatically through the late 1970's and early 1980's, and then fell as the oil boom faded. The remittances sent back to Sudan by the migrants have been an important part of the national revenue in recent years (Birks and Sinclair, 1982). The cost of living in the Three Towns rose almost 100% between 1972 and 1976 (Government of Sudan, 1979), making such contributions imperative.

In our brief review of the relevant literature on African societies we have seen a focus on homogenized urban or rural masses of African peoples. The dependency theorists in particular have adopted this approach because it permits an analysis of a perceived uniform effect that Western capital has had on the masses, resulting in exploitation and underdevelopment. These theorists do not focus on a particular case, such as Sudan, preferring to generalize about the "periphery" in relation to the Euro-American "center." Such generalizations may be appropriate while there is still much disagreement about the nature and direction of class formation in Africa. The issues of urbanization and work would seem to be natural components

of the debate on class, and it is in this area that more synthesis is needed.

The roles that African people may play as effective and struggling agents of change often disappear in the attempt to develop social theories of that change. It is with a recognition of the impact that individuals have on the world around them that we proceed to review the literature which is the specific background to the present study, the research that has fueled the "informal sector/ petty commodity production debate."

The Informal Sector/ Petty Commodity Production Debate

The explosive population growth of Africa's cities has promoted a serious debate on the capacity of Third World societies to provide jobs for everyone. As governments have generally failed to meet the employment needs of most of their urban dwellers, people have taken their own initiatives to devise strategies of work, primarily in very small enterprises. The reality of this situation in Africa's cities has been vividly dramatized and brought to the public debate by films such as Sembene's Borom Sarret (1963) or Sissoko's Nyamanton (1986). The academic debate that has ensued is over the nature of that work: whether it has, on the one hand, the potential to form a base for industrialization and more employment ("a training ground for future entrepreneurs" ILO, 1976), or whether it is

subordinate to world capital and likely to remain so under present political conditions.

A striking element of this debate has been its proximity to policy and prescriptions for social change. The field of "informal sector" studies has largely been driven by academics whose work is then critiqued by scholars on the political left. The latter group generally responds to policy ideas by presenting a critical review of the policy planners assumptions. This process contrasts most significantly with the dependendistas who do not generally pay as much careful attention to the grounded field studies of scholars involved with conventional research. One of the most outstanding critiques from the left of the "informal sector" approach (Moser, 1978), was in fact, written for the Development Planning Unit of the University of London. I believe this article to be a model of scholarship dedicated to positive change.

At its most useful level this debate has been a very self-conscious one. The main questions of the debate are stated directly, attempting to grab the attention of social planners with titles like, "Informal Sector or Petty Commodity Production: Dualism or Dependence in Urban Development?" (Moser, 1978), "Nairobi's Informal Sector: Dynamic Entrepreneurs or Surplus Labor?" (House, 1984), "The Informal Sector: A Solution to Unemployment?" (Davies, 1978), "Informal Sector or Subordinant Mode of Production?" (Davies, 1979), "Who Are the Casual Poor?" (Bromley and

Gerry, 1979), and "A Dualistic Labour System?" (Bremen, 1976).

The discussion in this section will review the most salient features of the informal sector approach for an understanding of urban social organization followed by a summary of the critique of this concept. While the type of small scale economic activity found in the informal sector is often identified by planners as a solution to urban unemployment, researchers now are beginning to consider what is actually happening within the small workshop or firm. The discussion has reached the point of researchers asking, how does the organization of a tiny (one to five persons) firm relate to the wider society and vice versa?

The informal sector concept is very much an outgrowth of the modernization paradigm. The use of the term "informal" is essentially an improvement on the "traditional-modern" dichotomy in describing the coexistence of large-scale, capital intensive factories and small, labor intensive, income-generating activities. The informal sector is thus a residual concept, describing everything that is not large-scale industry in the Third World city. Neoclassical economics contributed to the concept by way of the "segmented labor market" hypothesis which viewed workers attracted to one or the other of two distinct sectors depending on a variety of human capital variables such as level of formal education achieved or father's

occupation.

The "formalization" of the informal sector concept came at time when the development theorists were moving from a concern for "accelerated growth" in Third World economies to concern for employment in regions of burgeoning population growth. The International Labour Organization (ILO) launched its World Employment Programme (WEP) in 1969 as its contribution to the Second United Nations Development Decade. Identifying employment as a socio-political issue, the ILO sent its first Employment Mission to Kenya in 1972. One of the results of the Mission was an attempt at some precision in defining "informal sector:"

"The Comprehensive Employment Strategy Mission to Kenya defined (informal sector) as a way of doing things characterised by (1) ease of entry, (2) reliance of indigenous resources, (3) family ownership of enterprises, (4) small scale of operation, (5) labour-intensive and adapted technology, (6) skills acquired outside the formal school system, and (7) unregulated and competitive markets" (ILO, 1976, p. 376).

The ILO's researchers studying the urban informal sector in Kenya did credit the social science origins of this concept. A contemporary source was Hart (1973) who, in an important article on Accra, stresses the essential contribution of low-wage informal sector workers to the urban economy. He contrasts formal and informal in this way:

"The distinction between formal and informal income opportunities is based essentially on that between wage-earning and self-employment. The key variable is the degree of rationalisation of work - that is to say, whether

or not labour is recruited on a permanent and regular basis for fixed rewards" (1973, p. 68).

The term "informal sector" was selected by Hart after he considered the relevance of Marxian labels for the urban poor such as "lumpenproletariat" or "reserve army of the unemployed." The "autonomous capacity for generating growth" (1973, p. 61) that Hart saw in these small scale economic activities of urban Ghana suggested to him that a more "neutral" label for the activities would be appropriate.

The work of Hart and the ILO stimulated a "small scale industry" in itself of urban informal sector studies in a variety of Third World cities. But the roots of the dualistic, formal-informal division of an economy may be traced to the work by Boeke (1953) and Geertz (1963) on Indonesia. Boeke saw minimal interdependence between the capitalistic and "backward, pre-capitalistic" sectors in Indonesian towns. He viewed this lack of connection between the two sectors as signalling the "intractability of underdevelopment." Geertz (1963) in his study of a small, Indonesian town, contrasted "bazaar-centered" and "firm-centered" economic activities as distinct points on a continuum. He did describe the flow that took place between these two types but nevertheless identified characteristics which Geertz felt made them independent of each other. "Bargaining," an "absence of a fixed price system," and a lack of "advanced products" kept the bazaar economy "behind"

the firm-centered economy in terms of "development."

In the 1970's and 1980's the informal sector quickly became a scheme for ordering a wide variety of research data. Studies of specific cities proliferated, sponsored by the ILO's World Employment Programme and other agencies. Studies of African cities included Dakar (Gerry, 1974), Abidjan (Joshi, et. al., 1976), Yaounde and Accra (Steele, 1979), Lusaka (Todd and Shaw, 1980), Lome (Demol et. al., 1982), and Nairobi (House, 1984).

The definitional problem has plagued the field however with some equating the informal sector with "urban poor" or as a "last economic resort of the underemployed" (Hofman, 1986). Others classified the informal sector as consisting of those people who lived in slums or squatter settlements, or divided formal from informal on the basis of income opportunities (McGee, 1973). McGee also uses wage versus non-wage labor to contrast formal and informal sectors. Occupation has also become a criterion of informal sector membership with beggars, prostitutes, shoe shine boys, and match sellers often identified as characteristic of the work available in the sector (Moser, 1978). Other researchers have seen the informal sector as primarily artisanal (Orlove, 1974; Madani, 1981).

Interest in urban informal sector studies has spanned the social science disciplines - sociology, anthropology, geography, and economics - each adding a special dimension to an understanding of the problem. Geography, for example,

has brought concern for the spatial element in urban development to bear on the problem of the informal sector's access to resources (Santos, 1979). But the most optimistic picture of informal sector activities has emerged from the field of economics, which pinned considerable hope on the promotion of small scale industries in the informal sector as a boost to increasing urban employment opportunities. This hope has followed the widespread disillusionment with the import-substitution model of industrialization.

Two primary areas of interest in economic studies of the urban informal sector have been the "efficiency" of the small businesses and the societal/institutional "bottlenecks" to the proliferation of such enterprises. Ayata (1982) summarizes the goals of informal sector promotion as economists and others became increasingly involved with policy:

It was suggested that some resources be diverted to cottage industry in order to prevent extremes of poverty; cottage industry could contribute to national productivity; it could be helpful in promoting decentralisation, minimizing regional disparities, preventing slums and the growth of an uprooted population concentrated in the towns, creating jobs for women, increasing income and the aggregate demand... making efficient use of local raw materials, conserving skills and creating a manpower base for large scale industry" (p. 6).

Ayata also mentions the potential role of "cottage industry" in preventing "social unrest" through the provision of employment.

The World Bank (1978), a major supporter of small scale

industrial development, identified some of the constraints producers face. These included problems with obtaining materials due to shortages and lack of access to import channels, lack of access to credit, and unreliable middlemen. In another report the World Bank (1983) described government biases against small scale producers as a major constraint. African governments have generally favored large scale industry with attractive interest rates on loans and low duties on imported equipment. Chuta and Liedholm (1979) contrasted the 100% "luxury" duty small scale tailors faced when they wanted to import a single sewing machine in Sierra Leone with the incentives of low duties for industrial equipment for large scale factories. The analysis of economic constraints as impeding small scale industrial development was an improvement over earlier allusions to "personality traits" and psychological variables such as a lack of "entrepreneurial mentality" as blocking African economic development (Kilby, 1965; Marris and Somerset, 1972).

The interest in the advantages large scale or "formal sector" industry were given over the informal sector led to a greater concern for the relationship between the two. Chuta and Liedholm (1979) described the "backwards and forwards linkages" that connected small scale industries to agriculture and larger capital-intensive industry through the provision of material inputs and the product output.

But the research community was also turning to the

effect that these linkages were having on the small producers of the informal sector and the changes that were occurring within what was once thought of as a "tradition-bound" sector of the economy. Remy and Weeks (1973) suggested that large-scale industry was not having any "spillover effects" on the informal sector; that is, that the co-existence of the two sectors was not promoting the informal sector into a duplicate of formal sector industry. Rather, the authors contended that the advantages afforded large scale industry were widening the gap between the two sectors. Leys (1975) saw the supposed employment-creating potential of the informal sector as instead, a "system of very intense exploitation of labour" (p. 267), characterized by very low wages, long hours, and intense pressure from the endless stream of job-seekers.

An explanation for continued urban poverty despite the promotion of employment-generating informal sector activities began to emerge from a group of neo-Marxist scholars. But again, it is interesting to note how close even the left remained to policy in the debate over the role of small scale urban industries. Most of the studies conducted by this group continued to be in the format of case studies of specific Third World cities, and in some cases, were even conducted under the sponsorship of the ILO's World Employment Programme (Gerry, 1974). Both sides of the debate are thus well-grounded in field research while continuing to build only slowly toward a major sectoral

theory.

The starting point for the Left's criticism of the informal sector concept was in viewing the unity of the urban economy as opposed to the dualistic "formal-informal" dichotomy of the modernization and neoclassical economics models. What was viewed as a "transitional stage" in the process of modern industrialization by some is viewed as the subordinated result of the spread of capitalist relations by the left, with the informal sector actually playing a vital role in that political economy model. But the latter view is not simply a radical diatribe against development assistance. At its most useful level this commentary also provides a detailed analysis of the extreme heterogeneity in what is otherwise perceived as a catch-all for the urban poor. The leftist scholars have contributed an analysis of the process of change and an evaluation of the impact of government intervention in this sector (Moser, 1978; Bromley and Gerry, 1979; Davies, 1978).

Moser (1978) and others suggest that the urban activities which have been characterized as "informal" would be subject to more effective analysis if classified as "petty commodity production," a term from the Marxist lexicon which describes an incomplete separation of capital from labor. In petty commodity production the owner of capital is also a direct producer for the market (Scott, 1979), and the producer's labor is his most important input. Much of petty commodity production is performed outside of

wage labor relationships.

The intellectual origins of the petty commodity production analysis lie in a concern for the articulation of capitalist and non-capitalist forms of production (Meillassoux, 1972; Terray, 1972). A group of French Marxist anthropologists have tried to describe the precise set of exploitative relationships between a dominant capitalist form of production and a subordinate non-capitalist one (Long and Richardson, 1978). The subordinate mode is essential to the maintenance of the dominant mode through the extraction of its surplus. Many scholars, including Gerry (1979) and Long and Richardson (1978) have pointed to the lack of attention modes of production analysis has given to the internal dynamics of the subordinate mode.

The dualism of the formal-informal sector approach is only rejected by modes of production analysis as the former emphasizes the separation or independence of the two sectors, one representing "modern values" the other representing "traditional values." Gerry (1979) identifies great differences in scales and relations of production between the capitalist, formal sector and the petty commodity producing informal sector. In the present study, the terms "informal sector" and "petty commodity production" are used somewhat interchangeably with the understanding that "informal" does not imply an autonomous construct. "Petty" might also have a pejorative sense, but it is defined by Gerry (1974, p. 10) as meaning "...small scale

both with regard to output, techniques and the possibility of cumulative expansion..."

It is important in the analysis of petty commodity production to describe the historical development of its relationship to capital. Petty commodity production is not the vestigial remains of a "traditional" economy, as is often implied in some informal sector studies, but is rather, a result of the expansion of industrial capitalism in Africa. Williams and Tumusime-Mutebile (1978, p. 1103) describe the mutual dependence of capitalist and petty commodity production:

"Petty commodity producers provide inputs which the capitalist firms are unable to produce profitably. These include cheap food and consumer goods for the employees of capitalist firms and the state which services them, thus reducing wage costs and inflating the salaries of managerial staff. They maintain the 'reserve army of labor' which limits the bargaining strength of organized labor, thus reducing wage costs, and ensures a flexible supply of labor to capitalist employment... They provide the potential market for capitalist firms. Far from being displaced by capitalism, petty commodity production... is essential to capitalist production."

Gerry (1979, p. 247) offers additional support for consideration of the dependence between capitalist and petty commodity production:

"When a country relies to a substantial degree on imported goods to supply its own distorted industrial sector, which very often is extensively penetrated by foreign capital, those activities which are unprofitable for capitalism to operate in a given period, are normally 'left' either to intermediate groups or, to a much larger extent, to indigenous petty producers."

Another important link between the two sectors is found in the dependence of petty production upon expensive inputs from capitalist production (imported sheet metal, cloth, sewing machines, nails, etc.). This often leads to the development of recycling strategies in which workers fashion lamps or braziers out of discarded oil cans or sandals from bald tires. These petty commodity producers, while still using inputs from capitalist production, at least are doing so at reduced cost (Gerry, 1974). Skills can be another connection between the two sectors with Gerry (1978) showing in one study in Dakar that 70% of the carpenters had spent an average of half their working lives in factory employment. Subcontracting between sectors, with a petty commodity producing firm providing temporary labor for capitalist enterprise, is another important process linking the sectors (MacEwen-Scott, 1979).

It might seem difficult to promote a world-historical analysis of such micro-processes as those described above but in descriptions of recycling, subcontracting and other petty producers' strategies, Gerry (1974), MacEwen-Scott (1979), Davies (1978), Long and Richardson (1978), Hansen (1980), Mkandwire (1985), and King (1979) have contributed case studies of Third World cities - Dakar, Harare, Nairobi, Lima, Lusaka - to that kind of understanding. Gerry (1974) contends that qualitative data was more useful than macro or quantitative data in researching the links between capitalist and petty enterprises because of the constant and

subtle changes taking place in the relationship.

The importance of the petty commodity production approach lies not only in its emphasis on the dependent nature of informal sector development in the Third World. The approach, as elucidated by some of its proponents, also provides clues to an understanding of the social differentiation taking place within petty commodity production. Far from viewing this structure as a homogenous mass of producers, Moser (1978) and others describe a "continuum of productive relations" that moves beyond a simple wage-labor or self-employment dichotomy. Indeed, the image of a continuum of economic activities in the urban setting is a realistic improvement on the two discrete sector model in that the former emphasizes the links and dependent relations obtaining throughout the economy.

Gerry (1979) sees the processes of differentiation taking place within petty commodity production as resting primarily on the transformation from relations of "personal dependence" within an economic unit, such as the household or family-based enterprise,

"... into commodity relationships which enable surplus to be generated, appropriated, and accumulated. This is typically accompanied by an increase in the number of workers employed, the gradual evolution of stable wage employment, and the increase in value of the means of production (pp. 142-143)."

The emphasis in this approach, confirmed through the qualitative case studies which have been its hallmark, has

been on the subtle process of change taking place within petty commodity production. Personal contacts play a large role in the ability of a producer to obtain access to scarce resources such as credit or raw materials, and improve his economic situation (LeBrun and Gerry, 1975). Thus there are degrees of subordination among petty commodity producers and throughout the economy. Bromley and Gerry (1979) offer a useful scheme for identifying points along the continuum, stressing that no category is exclusive or permanent. Workers change their strategies as circumstances demand or permit. The four categories that these authors describe as "casual work... defined as any way of making a living which lacks a moderate degree of income and employment" (Bromley and Gerry, 1979, p. 5) also represent the socio-economic conditions of the majority of subjects in my Khartoum research:

1. Short-term wage work: day or seasonal labor with few (if any) benefits;
2. Disguised wage work: use of a person's labor without his actually being a part of a firm, such as with piece work or "outworking." Worker is usually supplied with materials.
3. Dependent work: worker not a wage worker but is dependent on larger enterprise for credit, equipment, supplies, or outlet for his production;
4. True self-employment: a person "working independently, obtaining an income without engaging in wage working, disguised wage working, or dependent working... (H)e has a considerable and relatively free choice of suppliers and outlets, and also (is) the owner of his means of production" (Bromley and Gerry, 1979, pp. 5-7).

Of course, all of these "casual work" categories are found within general conditions of national economic and

social dependence on the world economy.

An analytic approach that complements the descriptive categories of Bromley and Gerry above is suggested by Long (1975) in his discussion of "economic brokerage." The synthesis of these approaches promotes the identification of strategies used by workers in the urban economy as they strive to generate income and improve their economic conditions. The "broker" is an economic actor - in the case of my research, an entrepreneur - who links the "local and extra-local arenas" (Long, 1975, p. 274). The value of this conceptualization of the urban economy is that it emphasizes the actions of individuals in the articulation of the subordinate and dominant forms of production in the economy. We begin to see the differentiation taking place within this "subordinate mode" and that a wide variety of strategies may be employed by urban workers, dependent on their varying access to resources:

"(T)he hallmark of the successful... entrepreneur is his ability to combine different types of social relations deriving from different modes of production and from different institutional contexts. This enables him to build up a relatively stable set of ties which become functional for mobilizing labor and other resources for production and marketing. It is this bringing together of diverse elements which, I believe, sets him apart from the stereotype of the capitalist entrepreneur" (Long, 1975, p. 275).

The role played by varying access to social resources in the establishment of successful petty entrepreneurship is a major focus of the present research. It is largely through an analysis of access that we may reach some tentative

conclusions about differentiation among petty producers. With this goal in mind, I now turn to a brief review of the literature on two important urban social resources, skills and space.

The predominant means of skill acquisition in the small scale industries which are the subjects of this research is apprenticeship training. The anthropological investigation of apprenticeship has been an interesting sub-theme of the literature on children and youth in developing countries. In the general anthropological literature children are "conveniently placed about to soak up culture" or help with appropriate tasks (Wolcott, 1982, p. 85). But in anthropological studies of apprenticeship we begin to see a clearer picture of the actions youths take in order to acquire a skill (McLaughlin, 1979; Peil, 1979; Callaway, 1973). Anthropologists and educationists may have found it easier to focus on apprenticeship than on undifferentiated children's activities because the former is a self-conscious and observable aspect of the transmission of culture.

The anthropological literature on traditional apprenticeship does not view the young apprentice as important to or part of the transformation of small enterprises from household to more capitalistic relations of production. One must look within the petty commodity production studies to find descriptions of the changing role of apprentices in the urban economy. Morice (1981) says that apprenticeship is strong in many Third World cities because

"... children's work is not socially recognized and cannot be freely sold on the labor market" (p. 146) and is thus "disguised" as apprenticeship. Gerry (1974), refers to the small scale entrepreneurs as being very dependent on the cheap labor of apprentices who are, in turn, "subject to various forms of paternalist work relations and paternalist exploitation" (p. 37)¹.

Space is another social resource that is in short supply to petty producers. From the petty producers' perspective, it is also spatial concerns that bring us closest to the relationship between petty production and the state, in that the state generally exercises complete control over access to urban space. Cooper (1983) refers to urban space as being "ideologically charged" particularly in the distinction between "legal" and "illegal" space. This distinction, he says, can determine how a specific space is socially organized in the Third World city, with squatters building non-standard housing and supplying unlicensed services in illegal space, while legal space is highly zoned and regulated.

Davies (1979) says that the state's strategy is not to eliminate the informal sector but rather, to keep it to an optimum size. This, Davies states, is most effectively done through controlling access to space for petty production. The case of Khartoum is ironic in that the government of this vast and sparsely settled country finds it necessary to exert such control over any space, but such regulation has

been part of the Three Towns' experience since the colonial era (Pons, forthcoming). In Nairobi, King (1977) states that the colonial government did not anticipate the rise and importance of petty production, which has resulted in poorly planned space. Scott's (1985) description of "unauthorized markets" in Lusaka is similar to the present situation in Khartoum, with the high demand for petty producers' products forcing some degree of compromise with a state unable to provide such products or services.

It is difficult to reach conclusions about the informal sector/petty commodity production debate. Informal sector studies have provided us with rich detail of urban work while neglecting the role of the wider economy. Petty production studies provide that comprehensive view but seem too deterministic, trapping producers in permanent subordination with insufficient data on the producers' vigorous strategies. The "casual work" concept seems ethnocentric, denying the importance of this work, as Davies (1979) says, "to those who are engaged in it." These workers view their toil as anything but "casual." Schwarzweller (1987) senses a new appreciation for grounded orientations in development studies while also noting greater sensitivity in recommending policy, "a maturing brought about perhaps, by the introduction of political economy perspectives" (Schwarzweller, 1987). It is this delicate balance upon

which I have rested this study of small scale enterprises in Sudan.

The literature presented in this review has been intended to support the examination of Sudan's small scale producers not as a residual aspect of the urban economy, but as historical phenomena with roots in the colonial and international ties of the country. The image of Third World societies is often one of dominating the individuals who build them; that society's health problems, shortages of work, or educational needs are beyond the capacity of individuals to cope with them. In this study, we step inside society for a close view of individuals confronting its challenges. My conceptualization of the role of the individual is very much linked to the methodology of this study, the subject of the next chapter.

NOTES

1. There is, of course, a literature on the guild apprenticeship in medieval and early modern Europe, mentioned by Marx and Weber, among others, in the discussion of the rise of capitalism in Europe. This literature does not seem germane, however, to my concern for apprenticeship in contemporary Sudan.

CHAPTER III

THE RESEARCH EXPERIENCE

The chronicles of social change in Third World cities are most strikingly revealed in the activities of the "informal sector," the small-in-scale, labor-intensive aspect of an economy. Within this structure an enormous array of socio-economic strategies are developed to meet the urban community's demands for products and services. The research from Sudan reported in this study - conducted using a combination of observational, survey and documentary techniques - describes the organization of three small scale manufacturing industries, the most dynamic point on the continuum of informal sector activities. The study also analyzes the transformation of these industries towards an increasing reliance on capitalistic social relations in an economy that is otherwise stagnating. Specifically, case studies of three trades, tailoring, carpentry, and metalworking, are presented which detail management of selected firms, changing patterns of employment in the trades, and relations between small scale industries and the

state as expressed primarily through the conflict over urban commercial space.

Researching the African urban economy presents a series of challenges to the social scientist in the field. Methodology in this study was largely determined by the subject of study: the "informality" and the unenumerated, small scale character of the trades under investigation require a qualitative approach to probe their collective essence. Gerry (1979) and others have suggested that qualitative research methods are more effective in the initial phases of this new area of Third World urban studies because of the need to elucidate subtle links between small workshops and the wider economy as well as the changes in social relations that are taking place within small scale production.

The importance of these trades to the everyday lives of Sudanese urbanites makes the research field one in which everyone encountered is an "expert." There are few residents of the Three Towns who are not willing to share information or impressions about these trades. This relationship between the specific area of study and the urban society reinforces the researcher's need to observe these industries as part of a wider socio-economic system, as reflecting the dynamics of social change that characterize all aspects of life in greater Khartoum.

A Ugandan proverb, "he who does not visit thinks his mother is the best cook," holds wisdom for the vast majority

of social scientists doing research today. This proverb has particular significance for me, beyond the meaning that I spent much time in Sudan visiting and sampling the cooking of many mothers. My work in Sudan was also my first major research project in Africa and a time to become familiar with a variety of research techniques. Social scientists often become devoted to particular methodologies and employ them under widely varying circumstances. Methodology becomes an end in itself for some, clouding the social issues it was designed to illuminate. In conducting this research I have tried to allow the subject studied guide me to the appropriate investigative tools and have sought to combine methods where possible, selecting from the strengths of each in explaining certain aspects of the wider research questions.

While the subjects of the study itself - working individuals in urban Sudan - greatly influenced my choice of research methods, I also went to Sudan fortified with American social science training and an understanding of Western perspectives on cross-cultural research. The writings of several researchers contributed significantly to the development of my approach. Part of this "methodological heritage" was derived from the literature reviewed in the previous chapter on the specific questions under study. But there is also an important body of work which expressly considers the act of research itself. In this chapter such writing will be acknowledged as helping to inform my

thinking on the subject of research. I will also review my own ideas on the research process and the steps that led to the completion of the project. Finally, the organization and purpose of the case studies that serve to focus much of the data in this study will be reviewed at the conclusion of this chapter.

C. Wright Mills has influenced researchers in all of the social sciences through his book, The Sociological Imagination (1959). His identification of "private troubles" and "public issues" (p. 8) as the core topics of social science has enormous relevance for the field worker. The private troubles of the individual, anonymous respondent, revealed through the interview process, become public issues through the work of the researcher. The personal economic and family problems faced by a carpenter or tailor in Khartoum for example, are aggregated in categories by the researcher who is trying to identify society-wide patterns and trends.

The "everyday life" quality of field work emerges from long-term involvement in the lives of dozens of informants. Such closeness to the subject under study promotes an inescapable and high degree of self-awareness in the researcher, particularly in the cross-cultural environment. Recent work by Denzin (1970) and Emerson (1983) has supported the researcher expressing in his writing the influence that his presence may have had on the study, an

acknowledgement that has been generally been suppressed in field workers' reports. The effective field worker becomes, as Douglas (1976) eloquently states, "part of what he seeks to understand," and so it is logical to include that phenomenon in the analysis. The primary effect of this acknowledgement is to place the research more precisely in time and to avoid the sense of an unchanging "anthropological present" in the reporting of the data. Of course, the researcher continues to take every reasonable precaution to reduce the interactive effects of his presence on respondents, but the common practice of removing from the final report all discussion of the researcher's influence on the subjects of study may also be viewed as biasing the actual results of the research.

Johnson (1975: 21) offers more general support of qualitative field methods stating that,

"...the observation of naturally occurring everyday events yields the fundamental data for building a more abstract (or theoretical) understanding of the basic properties of human existence."

An activity which often complements the observation of everyday events or serves as its foundation is the collection of "life histories," the importance of which has been emphasized by Mills (1959: 3,6).

"Neither the life of an individual nor the history of a society can be understood without understanding both... By the fact of his living, an individual contributes, however minutely, to the shaping of his society, and to the course

of its history, even as his is made by society and by its historical push and shove."

These ideas of Johnson and Mills are embodied in the case study approach, which involves the detailed examination of relatively few persons. Casly and Lury (1981) detail this method in the context of research in developing countries. They stress the case study's flexibility to the point of referring to it as "free wheeling," but suggest that the many lines of inquiry open to the qualitative researcher can make this form of research physically demanding. Casly and Lury contend that the success of the case study approach,

"...is entirely dependent on the ability, the experience, and the ingenuity of the investigator, who needs to be able to observe, interview, record, and continuously review the material collected" (p. 63).

The veteran researcher of rural West African society, Polly Hill, would add the "ability to be surprised" to the above list of tasks. She maintained (1970) that some of her most intriguing findings emerged from the flexible stance she took in research. Having the time to pursue questions that had not previously been considered with respondents often led to the most satisfying answers to her research problems. The time that the field worker spends observing also frequently yields useful data, as the many small dramas that make up daily existence unfold. A respondent may state, for example, that he copes with a recurring problem in only one way and then may behave in an entirely different way

when actually confronted with the situation. Also, the researcher may gain insight into social structure by asking questions that the informant does not usually ask himself. Acceptance of Hill's assertion that the African producer knows his business better than the Western researcher reinforces the reliability of this approach.

While qualitative methods are a concern of Casly and Lury (1981), their principal research tools have been quantitative. The Third World nations, and the African continent in particular, are severely under-quantified in terms of social data. We still lack adequate collection and reporting systems for statistical information from Africa. It is important therefore, that field workers in Africa make some attempt to collect quantitative data. In the case of my research in urban Sudan it was difficult to heed this advice for reasons that will be discussed below. They can be summarized as relating to the lack of accurate survey data, censuses, and local government documentation for the construction of sampling frames. Here, I would like to review some of the research literature which did influence my thinking and which emerges from more positive experiences in the area of quantitative data collection. It should be noted that much of this quantitative research is supported by generous U.S. Government funding, partially encouraged by the interest on the part of the present Administration in "private sector initiatives" in Third World development.

The African Rural Economy Program of Michigan State

University's Department of Agricultural Economics (MSU) has demonstrated the efficacy of some important techniques in small scale industries data collection. In their United States Agency for International Development-sponsored research, Davies, Badr, et. al. (1984) modified the innovative "multiple visit" approach described by Byerlee, Eicher, et. al. (1977) in regards to research on rural, non-farm employment in Sierra Leone. This "MSU aproach" has been used to study both rural and urban small scale industries in such widely varying areas as Bangladesh, Thailand, Jamaica, Egypt, and Botswana. In the urban Egyptian study (Davies, et. al., 1984), two or three interview schedules were used with each firm, collecting data from over 50,000 enterprises. Enumerators used microcomputers in the data collection process.

One of the surveys used in the MSU program of small scale industries research posed such questions to entrepreneurs as:

- the nature of primary and secondary products produced by the firm;
- the form of ownership of the firm;
- the location and type of building in which firm is housed;
- the size of the workforce;
- number of machines in use and value of equipment;
- use of power; and
- seasonality of production.

These descriptive items were useful to me in the development of my own interview schedule; however, I was also influenced by another researcher in the MSU program

(Mabawonku, 1979) who questioned the reliability of the apprentices' and masters' responses to surveys in his work in western Nigeria. He relied upon his enumerators' observations of workshop activities, in addition to the surveys, in order to establish a more accurate picture of the firms (p. 10).

While my methodology was informed by the approach to small scale industries research described above, I adapted and deepened aspects of that method in order to extract more detail and a different kind of data from the research situation. An understanding of the social relations of production in Sudan, a central issue of this study, is reached not only through the consideration of the internal economy of the firm - a main concern of the approach described above - but also through a consideration of the historical development of this type of production and corresponding class formation, as well as the role of the small scale enterprise in providing employment and services to the wider society.

In general, sociologists have not made extensive use of historical data in their work, but under the influence of such scholars as Skocpol (1978), Wallerstein (1974), and Wolf (1982), a strong role for historical analysis is entering the field. My work in Khartoum included a modest attempt to participate in this trend. I read extensively in Sudan's national archive, the Central Records Office, and in the Sudan Library of Khartoum University. Documents found in

these collections described the colonial rationale for the placement of urban marketplaces and the various attempts to control commerce in those areas, as well as the influx of rural migrants. I also reviewed documents that described early attempts to organize skill training programs and other aspects of the educational system that related to the trades. An examination of the historical data reveals that the harassment and containment of petty commodity production by the state that I witnessed in my field work are part of a process that has its roots in the colonial era.

The combined use of qualitative, survey and documentary methods is referred to by Denzin (1970) and others as "triangulation." This use of multiple methodologies in studying one social problem is seen by Denzin as raising sociologists above the "personalistic biases that stem from single methodologies" (p. 294). The triangulated methods, in effect, serve to check each other, compensating for inherent weaknesses. This approach is particularly valuable in cases where the researcher is working in a field site for the first time and where there is little prior research to provide contacts or sampling frames. Cole's 1971 work, Japanese Blue Collar, illustrates the use of multiple methodologies in sociological research as well as an effective way of reporting such data.

My own efforts at "triangulating" methodologies in order to explore problems of work in the urban informal

sector were met with success in approaching such issues, particularly within the logistical and budgetary parameters of my situation. My first priority was however, to elicit opportunities for long, open-ended discussions with informants. In this unenumerated, under-researched field of small scale manufacturing in urban Sudan, it was felt that any future social surveying would best emerge from a qualitative understanding of relationships in the city. The collection of detailed and participant observer data was particularly important in Khartoum because the only previous study of this specific population was a three-week sample survey of Khartoum's informal sector conducted as part of the International Labour Organization's Employment Mission in 1974 (ILO, 1976).

Language skills were essential to the participant observation method in Khartoum. Facility in English among Sudanese is limited to the most educated levels of society; even Khartoum University students perform poorly in English although it is the language of instruction. This is because English is not introduced as the primary language of instruction at the lower levels of the educational system. Of course, the vast majority of Sudanese, urbanites included, have little use for the English language.

At the same time, my two years of classroom study of Modern Standard Arabic in the United States were of little use in the research process, except for reading signs and an occasional newspaper. No one in the Arab world actually

speaks Modern Standard Arabic and the vocabulary of Sudanese colloquial Arabic varies considerably from this "standard." My research schedule had the luxury of time built into it, so I could spend three months learning to speak Sudanese Arabic "in the streets" so to speak, while also familiarizing myself with the markets of the Three Towns. The lack of English-speakers in the community was a boon for my purposes because it forced me to use Arabic in every social situation. I should also credit the saint-like patience of the Sudanese in their willingness to listen to my new tongue.

Wandering the streets and alleys of Khartoum and practicing Arabic with a variety of Sudanese increased my awareness of the organization of life and work in the city and helped me to identify research sites. I spent six weeks noting the locations of important small scale manufacturing activities and conducting an informal census of the manufacturing population (a research tool that did not exist). It quickly became apparent that tailoring, carpentry, and metalworking overwhelmed all other forms of petty manufacturing in terms of numbers of "firms." This fact, combined with the stationary nature of this type of production (as opposed to more mobile producers like house builders or auto mechanics), made tailoring, carpentry and metalwork logical choices for this study.

But tailoring, carpentry and metalwork are only points on a continuum of urban productive activities. The

observing participant in urban Sudan is confronted with the densely woven fabric of these activities as he travels around Khartoum and Omdurman. Indeed, his very movement is supported by the Toyota pick up trucks converted into bakasi, the cheap transport of urban workers and students. These vehicles, fitted with two parallel wooden benches and usually a sheet metal canopy to protect passengers from the sun, are found - providing there is a supply of gasoline - at stations throughout the Three Towns and will also stop when hailed from the street. The driver, who may or may not be the owner of the vehicle, is assisted by a camsari, a boy who collects fares and solicits passengers while hanging precariously from the rear bumper.

Urban transport is an important area of informal sector expansion both due to high demand for the service from an exploding urban population and to the inefficiency of the government bus services. Most of the government's fleet is regularly out-of-service, and buses that do run are always so packed at rush hours that passengers not experiencing the crush of riding inside are clinging to the fenders and doors of the vehicle.

Where lines of bakasi form, other informal sector traders are sure to be found. Vendors selling peanuts, pumpkin seeds, used books, green branches for dental hygiene, underwear from China, plastic cups, home-made bread or peanut butter, cold water, oranges piled in pyramids of four, prayer mats, plastic sunglasses, and the

hibiscus-flower drink, karkadeh join the commuters seeking transport to form an instant market. All of these products may be found in the main market areas as well.

Services such as shoe repair or watch cleaning and mending may be found at more established stands along the sidewalks and verandas of the markets. Prostitutes and beggars, the latter far outnumbering the former in Khartoum, also solicit passersby. The beggars construct shelters from discarded cartons and plastic sheeting and make their homes in the vicinity of mosques, reminding the faithful of their charitable obligations.

The residential neighborhoods are also supplied with informal sector goods and services. Men calling "nabuk, nabuk!" travel the side streets selling - from sacks on a camel's back - a raisin-like dried fruit to children. Others shout "angareb!" as they walk their routes carrying colorful coils of plastic rope, seeking traditional Sudanese beds in need of repair.

The empty lots of the residential areas may be centers for car repair or charcoal making, both important informal sector products. Rubbish heaps are also found in the empty lots and at the edges of neighborhoods, major sites for scavenging and recycling of the city's refuse.

The capital city's government bureaucrats do intrude upon these activities, either to harass unlicensed or illegal producers or to purchase their products. The latter activity is far more common because the informal sector

provides many of life's basic commodities to the metropolitan area.

In order to improve my language and observational skills I began to chat with workers in many of these trades - but especially from the three that I had chosen for study - and eventually, to request permission to sit and spend time watching the men and boys at work. The exigencies of Sudanese hospitality worked in my favor and no one refused what was probably seen as a bizarre request. It should be noted that, while I am deeply concerned with the role of women in African development, I felt that I could not effectively penetrate the world of women's work in this segregated society. Also, women are not involved in any urban manufacturing activities in Northern Sudan. The most recent data available, taken from the 1973 Census, show that women aged 10 and above have only a 9.8% participation rate in the urban labor force (compared with 23.7% in rural Sudan), (Government of Sudan, 1979).

After three months of language study in Sudanese Arabic, vocabulary development through the observation of the production process, and exploration of the urban manufacturing setting, I was anxious to begin the formal research. I had decided that the best way to conduct interviews with workers in selected firms would be with the help of an assistant, the recruitment of whom proved to be a difficult task.

The first Khartoum neighborhood in which I lived was

home to both expatriates and wealthy Sudanese. The neighborhood was also home to the idle sons of the wealthy. Many of these youths presented themselves to me as potential assistants, and I went to different markets with each applicant in order to test their abilities. The major problem was that these bourgeois youths had little rapport with their working-class countrymen. The young men would either dress in a style meant to impress me and indicate distance from the subjects of the study, or only reluctantly participate in market social activities, like communal breakfasts, that are so important to the Sudanese research experience. This problem with assistants continued until I moved to the working-class Omdurman neighborhood of Thawra in order to share "bachelors' quarters" with members of the Republican Brotherhood, a reformist Islamic social movement.

These men came from virtually every social class and region of Northern Sudan and also had many relatives in the urban community. Through my contacts with this group I was able to recruit an assistant with a rural migrant background and good understanding of working-class life. He had also been exposed to enough of the intellectual element of the Republican Brotherhood to understand the basic objectives of my research and not to find working with a khawaja (foreigner) particularly bewildering. In addition and most important, his good humor and strong identification with his culture carried me through many difficult situations.

Together we developed a scheme for visiting workshops and interviewing workers. I had obtained an appointment as a Research Associate at the Khartoum University Institute for African and Asian Studies and used this position, recognized by urbanites, as my affiliation for workshop entree. I would introduce myself to workshop owners as a researcher from the university and then Shams, my assistant, and I would begin the interview. When necessary, Shams would "translate" from my broken-Arabic to a more comprehensible form. His most important role was to take detailed notes of the interview in Arabic while I jotted ideas down in English. At the end of each working day we would spend about two hours transcribing the day's notes. Several times a week I would type these notes for a more legible record. This somewhat cumbersome system permitted me to reflect thoroughly on workers' responses to my questioning and on my observations of the organization of production.

The workshops that served as observation sites were selected in a "purposive sample" in order to ensure representation of the major forms of production. These included one-man firms employing one apprentice, producers renting equipment, producers owning equipment but renting space, and producers employing combinations of apprentice and wage labor up to ten workers. Five firms from each trade were selected, one to represent each of the levels of production described above. As we did not want to burden any of these workers with our constant presence in their small

workshops, we would spend three or four hours in one shop in one day and return several times over the course of the research for more detailed information or for information on another aspect of production. This pattern of research was also more compatible with the urban setting, where commerce and society link institutions across the city. At the same time however, observing only the working day of the producers was a qualitatively different experience from the research associated with field anthropology. Participating in both work and household spheres of all informants is a difficult goal in the urban study, where work is generally separated from the household.

The sense of field work being an interactive process was my strongest impression during this period. Having lived and travelled extensively in Africa and been a serious student of African social science prior to my Sudan experience, I had assumed that "culture shock" would not be part of this sojourn. But after three or four months of daily interaction with the urban poor I found myself "shocked" to realize that I had difficulty in identifying with these people, or worse, in really listening to them. My previous contacts with Africa, as a teacher or as a student in the United States, sheltered me from this kind of intensive interaction with poor and working-class people. My realization of this gap in my understanding of Africa and a new comprehension of the effect of poverty on the western observer was the beginning of the end of feeling ill-at-ease

in Sudan.

I am also convinced that a major reason for my initial negative feelings was my confrontation with the difficulty of field work. Researchers have often noted that one cannot adequately prepare for the field work experience in the classroom. It requires intense, long-term concentration, and in my case, observation of activities in another language. Adjusting to this process and becoming comfortable with it takes some time.

A most important part of my consciousness-raising was the set of reactions to my presence that I gleaned from my informants. These Sudanese urbanites were probably more aware of what I was about than I was and this helped to put me in my proper place. For example, half-way through a morning's interview, a tailor paused and asked me if this research was for my Master's or Ph.D. degree? Another informant asked, "how will we benefit from your research?" At another site a carpenter informed a friend while both were in my presence, "You won't benefit from this American's research, but it won't hurt you any either."

I was very careful in all of my activities in Khartoum to be as discreet as possible, drawing as little attention to my foreign self as possible. I eschewed the purchase of a car or motorcycle and took public transport everywhere (which probably added six months to my time in Sudan). I dressed in a neat and simple manner, modeling my wardrobe on that of the average Sudanese functionary. One day however, I

realized that my efforts to be discreet were of little use when an informant told me, "Steve, you are always dressed so well." He was apparently referring to the quality of my American clothing, the durable khaki and the sturdy shoes. I had thought that the heat and dust of Khartoum would make me look more like everyone else. But the deprived eye is a sharp one, and once again, my position in Sudan was made very clear to me.

After a year of participant observation in the small scale industrial workshops of the Three Towns I felt that I knew the situation well enough to attempt a small survey. I had tried many different ways to obtain information on the numbers of firms in the Three Towns but without success. Licensing records had potential but they were generally inaccurate or out-of-date. In fact, I once visited the local government office responsible for carpenters' licenses in a particular jurisdiction to be told that, according to the records, there were no carpenters in that neighborhood. From the door of this office however, one could see two carpentry workshops. Eventually, I asked the official in charge of all licensing in the Three Towns to survey the local bureaus for me, but not one of his subordinates responded to his request for information.

At this point I felt a confidence born out of necessity that my knowledge of the urban workplace would permit me to take a purposive sample of firms from the small scale industrial areas and neighborhoods that would represent the

sector accurately. I had determined that there were approximately 1,200 tailors working in shops in Khartoum and Omdurman and would try to survey ten per cent of them. I was also able to determine that there was a total of approximately 1,200 carpenters and metalworkers in Khartoum and Omdurman from which I would sample 50 of each. The survey emerging from research grounded in participant observation would effectively complement the qualitative data which in turn would support the non-randomly sampled survey.

The brief survey, which appears in the appendix to this study, was focused on measuring the dependent variable, the transformation from less to more capitalistic relations of production in small scale industries. The questions employed to operationalize the independent variables - access to educational, skill, capital, and labor resources - were grouped in order to maximize the information relating to the "transformation-oriented" strategies or behavior of the entrepreneurs.

The following sampling procedure was used to prepare for the survey and enforce some kind of consistency: in areas of dense concentrations of workshops, every fourth shop was approached for an interview. In residential neighborhoods, where the concentration is much less dense, one shop per block was selected. A pre-test of the interview schedule was conducted in one particularly dense market area. This market was not used in the later survey so as to

avoid the interactive effects of two surveys. In the course of the pre-test, we learned that open-ended questions worked better than multiple-choice questions. An open-ended interview schedule also resulted in substantial responses which only added to the detail of the participant observation phase of the data collection. Having spent a year with workers in these occupations, my assistant and I were already very familiar with the range of responses to our major questions. Because a random sample was not possible however, the survey data have a limited range of inference.

The survey itself, which appears in the appendix to this study, was conducted in much the same way as the initial interviews during the participant observation stage of the research. I would introduce myself and my assistant as well as the purpose of our work ("a study of work and skill training for Khartoum University"), and my assistant would read the 35 questions and note the responses. I would listen and take notes on tangential issues, the physical details of the workshop, and questions for follow-up. I generally engaged in secondary probing of the respondents based on my immediate impressions.

The survey was, in general, well received. People in any society appreciate having their advice asked of them and the survey was partially couched in these terms. However, the communal aspects of Sudanese society can influence the conduct of such a survey. It is very difficult, for example,

to isolate the respondent in order to ask questions about his work. Passersby and friends of the respondent could often be found peering over my clipboard as we proceeded with the interview schedule. I was not overly concerned about interactive effects however, because privacy is suspect in this society, and few decisions are made without at least family participation in the process. Also, the large crowds that gathered at many of my appearances gave me a better understanding of slow work periods and unemployment.

When we finished with administering the questions to 200 tailors, carpenters, metalworkers, and some of their apprentices, a project that took place over about three months of time, there was time to go back to some of the initial informants to investigate further interesting or perplexing issues. For example, during the course of the survey we encountered a carpenter whom we had met working in another shop during the participant observation phase. We were able to go back to him and learn that he had been "sub-contracted" to the second firm during a rush period and that this was a common arrangement. He had not revealed this detail to us during the survey questioning. The time at the end of the survey also allowed us to see another "season" of production which, while not as important as in agrarian communities, did influence my understanding of the business cycle in urban Sudan.

The core of this study has been organized into three chapters - tailoring, carpentry, and metalwork - which report and analyze both the qualitative and quantitative data. Each chapter has four sections which address broad questions of 1) management concerns in the small scale industrial workshop, 2) employment concerns, primarily the wage-work phenomenon in small scale production, 3) recruitment and training or "apprenticeship," and 4) producer relations with the state and spatial concerns in production. Each of the three chapters is an attempt to describe and analyze the organization of production in a particular small scale manufacturing industry.

An important presentation of the data within these four sections is in the form of case studies of individual informants, the names of whom have been changed. These case studies are offered in order to detail the role that the individual plays in this complex social system. The data on social organization from Third World cities is often highly aggregated, so the object here was to highlight significant aspects of production from the individual's point of view. The brief case study is also an opportunity to report the richness of urban life that was observed during field work. While the processes described in this study are characteristic of underdevelopment, Sudan's particular relationship to the world economy is a product of that country's unique history. The case studies thus help to ground general theories in the lives of ordinary people.

Specifically, the case studies focus on workers' strategies to improve their standards of living. Both successful and failing strategies are featured. The generalized chapter discussions in which the case studies are anchored complete the picture of major urban trades.

The essence of this study is the chronicle of the transformation of small scale industries towards more capitalistic relations of production, an event that was taking place during the period of this research on a micro-level and seemingly, before my eyes. By centering the investigation on the individual worker's themselves it is hoped that, as data pour in from the Third World cities, an understanding of the role of the individual in this dramatic change will emerge.

CHAPTER IV

TAILORING

Tailoring enterprises have a predominant position among the small scale manufacturers of Khartoum and Omdurman. This finding is consistent with evidence from many Third World cities¹. While the problem of enumerating tailoring establishments has been discussed above, it is estimated that at the time of this research there were approximately 1200 tailors, self-employed or employees, in Khartoum and Omdurman. This chapter will describe tailors as members of a ubiquitous Sudanese urban profession. However, tailors are not viewed in this discussion as a homogenous mass of producers. The relations of production that define contemporary tailoring are seen, rather, as demonstrating the profound class differences that are rapidly emerging within the trade. The variation in employment strategies among tailors, the changing cycles of capital accumulation of which tailors are a part, and the relationships that link tailors to the wider socio-economy are also to be addressed in this chapter.

The International Labour Organization and other observers² believe that an important reason why tailoring occupies such a large number of urban workers is because of a perceived "ease of entry" into the trade. This perception, which is based either on the sheer numbers of tailors found in large cities or on the relatively simple technology of their machines, distorts the reality of work in the African city. The worker-centered investigation reported in this study seeks to describe the lives of urban tailors, their trade providing most of whom with only subsistence incomes. At the same time tailoring is an occupation that produces a basic commodity for both the urban and national societies. Khartoum and Omdurman have only a handful of retail clothing establishments and few, if any, large-scale clothing importers or mass-producers.

In serving the urban community tailors have established themselves in shops throughout the Three Towns. Virtually every class of neighborhood and market area contains the several types of tailoring specialties. The specializing trend that has developed alongside of increased urban demand for goods and services has divided the trade into three major types of production: The biladi ("country") tailor produces the traditional clothing found in the wardrobe of even the most sophisticated urban Sudanese, the gelabiya and the underclothing worn with it. Sitati tailors produce women's Western-style dresses, worn with or without the traditional taub or veil. The afranqi tailors (a colloquial

term for "foreign") make Western-style trousers and shirts for men.

The strategies of workshop organization vary a great deal among tailors and are closely linked to the income level of the surrounding neighborhood and/or the type of market area in which the shop is located. Only a minority of tailors own or rent their shops and own their machines. Most tailors are involved in some type of rental of their sewing machine, renting from either a merchant or another tailor. It is the growth of these rental schemes which has contributed to the perception of "easy" entry into the trade. Tailors can also be employed to work on someone else's machine for wages and non-paid apprentices may also be found in some tailoring workshops. The latter employment strategies are seen primarily in jahiz or "ready-made" clothing establishments which are the most important part of the current transformation of small scale production in urban Sudan.

The history of tailoring in Sudan is a brief one. Just as the sewing machines that define the craft of tailoring are imported into the country, the craft itself is also of foreign origin. While the Singer Sewing Machine Company was one of the world's first multi-national corporations, distributing its products all over the world, the machines were not accessible to Sudanese tailors until the World War II period. The demands of the war drastically changed the economy, incorporating more Sudanese into productive,

non-agricultural roles. Mahmoud (1984) found wealthy merchants in Port Sudan who had begun their careers as tailors with contracts to sew British military uniforms.

Prior to this time, as early as the 1920's, the Singer Company had its own agents in Khartoum and Port Sudan³. This indicates that unlike smaller international corporations that contracted the work of commercial representation to local merchants, Singer was well established in Sudan. However, the Singer product was being sold to foreigners who in turn made clothes for the resident foreign community. The Sudanese people at this time wore home-stitched or woven clothing almost exclusively. Sometimes family members would even share an article of clothing further reducing the need for an extensive wardrobe. There is evidence that in the precolonial period the subject classes were actually prohibited from wearing "sewn clothes" in some areas where feudal-like social relations persisted⁴.

Today's older tailors, recollecting their predecessors or mentors in the trade, indicate that there were British, Italians, and other Europeans working as tailors during the late colonial era as well as Turks, Armenians, and Syrians⁵.

Long-term traditions of tailoring production barely exist in a society where the trade is relatively new, although some aspects of tailoring production may seem reminiscent of the medieval "putting out" system. We are confronted with a different set of historical circumstances in this case: urbanized Sudan is largely the result of

processes set in motion during the colonial period. While the post-World War II growth of small scale manufacturing introduced during the colonial era has been described above, the specific development of tailoring as an important urban trade can be seen in the rapid change in consumer tastes, the trend towards a sense of individualism, and a substantial growth in personal consumption for the first time in Sudanese society. The contemporary migration of Sudanese workers abroad and their return have greatly influenced the rise of consumerism in urban society.

In this study, the ubiquitous tailor is found to be interacting with the urban consumer, the cloth merchants, and with other tailors to establish an occupational image of which all urbanites are aware. Indeed, it is not unusual for first time foreign visitors to Khartoum to notice the large percentage of the population that is garbed in traditional clothing, in comparison with other African capitals. It is difficult to find someone living in the Three Towns who does not have firm ideas about the skills, product quality, or locations of the tailoring trade. While the Khartoum public's knowledge of the details of the trade are not necessarily accurate, the fact that people do have strong opinions about tailoring- where to find the best tailors or how much one should pay them -identifies the trade as important to urban life in Sudan.

For these reasons tailoring is an ideal vehicle for an exploration of changes in the urban economy. While the

tailors' workday was a central part of the research, we may also learn about the wider social environment from such key players on the urban scene. This intimate connection between tailor and society makes the tailor very vulnerable to rapid changes in the economy and we will analyze the resulting poverty in which many who are associated with the trade live.

As an important urban service and source of consumer products tailoring is part of a dynamic urban system. In order to assess carefully the transformation that the tailoring trade is presently experiencing as Sudan is increasingly incorporated into the world economic system, we will view both the present structure of the trade and the process of its transformation. At the same time we will try to establish what are the conditions of tailoring. The discussion will be divided into four areas in order to raise and answer major questions in more detail: 1) management/entrepreneurship- what are the strategies of production in tailoring and how is the tailoring workshop organized? 2) Employment- what new forms of employment are being created in tailoring? 3) Apprenticeship- how is the apprenticeship or training system changing? 4) How does the state use its authority over urban space to control or influence small scale tailoring production? The discussion of these issues permits us to see clearly the lack of homogeneity in this group of urban producers and the rapid emergence of new social distinctions among tailors.

A. Management/Entrepreneurship

Scattered throughout both the residential and commercial areas of Sudan's Three Towns the tailoring shops appear, in general, to be one-man independent enterprises. Closer examination reveals complex social arrangements requiring the tailor to expend considerable effort in managing his business. My intention in the focus on management is to highlight the strategies that the small scale producer employs in the organization of his business, including his interaction with the world economy.

The analysis of the "management" of a tailoring enterprise is by far the most complex aspect of the trade that is considered in this study and indeed, touches the issues of employment, training and relations with the state as well. Management, as defined here, is the effort made by a tailor to maintain or improve his economic position by mobilizing effectively the resources available to him. Evidence of management in an enterprise is the proof of an entrepreneur's attempt to control his life in the face of powerful economic forces rather than an indication of an individual's inherent "business acumen."

One of the reasons why management in tailoring is such a complex topic is that the trade is characterized by great diversity in its strategies of production. Access to a sewing machine, eventual acquisition of a machine, and

establishment of a retail trade could be considered the ideal pattern for tailors to follow in the trade, at least based on the expressed plans of many tailors. The reality is, however, that most tailors are caught somewhere in the middle of this cycle for the greater part of their productive lives. Never owning a sewing machine, 54% of the sample of tailors surveyed for this study are working on a machine that is rented- in one of a variety of ways -from another entrepreneur.

Within this 54% are representatives of the greater part of the tailoring population: those who derive little more than subsistence income for their families from the trade. These tailors, renting sewing machines and surviving on low incomes, typify both an initial stage and an end point for many in the tailor's cycle of capital accumulation. Apprenticeship training- to be detailed below -begins the cycle. Finding a job depends largely on personal relations although not as much on family ties as it once did. The tailor searches for access to a machine so that he may practice his trade. His actions may appear autonomous in that the tailor brings his labor and his independently obtained skill to the market freely, but it is actually at this point that a lifetime of financial encumbrances begins for the tailor. The concept of "renting" is not part of the image tailors have of their work, that is, tailors do not refer to this arrangement as "renting." The tailor's link to the machine owner is perceived as a more personal one

than the western concept of "rental" may imply.

The most important sewing machine rental arrangement is known by the tailors as shughul bi nus or "half work". This is most commonly an arrangement between a cloth merchant who diversifies his business by investing in sewing machines and a tailor who does not own a machine. The tailor agrees to use one of the merchant's machines and to pay the merchant half of what he earns from producing made-to-order garments for sale to individual customers. The merchant/machine owner keeps a tally of the tailor's production. The tailor pays the merchant on a weekly or a monthly basis and is usually allowed to subtract expenses for tea and meals before making the calculation for payment to the merchant.

Having tailors at work in front of one's shop is an important marketing technique for cloth merchants. Much of the clothing worn by urban Sudanese is made-to-order which means that the consumer must first buy the cloth required for the making of the desired garment, two square meters for a shirt, three and one half square meters for a gelabiya, etc. While the consumer is not obligated to use a tailor attached to the shop where he bought the material the convenience of having a tailor at the point of purchase is often appreciated. The most prosperous cloth shop owners have three tailors, one representing each of the major clothing styles- biladi, sitati, and afrangi, in front of their shops.

The tailors, seated at their rented machines all day and

watching customers file in and out of the cloth shops, often aspire to invest in the retail cloth trade if they could acquire the necessary capital. Involvement in retailing is preferred to expanding their production of clothing. O'Brien (1979, p. 178) draws on evidence from Sudan and Ibadan, Nigeria to support the notion that these "disguised wage workers" look toward merchants rather than capitalist producers for their models of success, as limited as their chances may be to attain an improvement in status. The evidence indicated by the present study, suggests that the rise of and the accessibility of the "ready made" trade has changed this outlook to a limited extent, a change that will be described below.

Stories of successful tailors turned merchants or major producers abound in the urban suq. But they primarily serve as a distraction for the tailors, and most express little confidence that these goals are personally attainable. One tailor who seems to represent the stalled hopes of "half work" tailors as well as their ability to cope with an unstable economy, will serve as my first case study. An older tailor who has followed a common path to a position in urban production is presented in this case. The strategies he has pursued to improve his position and which have led to his present status are detailed.

Case Study A: Ahmed, "biladi" tailor in Suq al-Arabi, Khartoum.

When I first visited the shop of Ahmed he was renting a

corrugated iron and wood stall or kushuk in Suq a-Sha'abi ("People's Market") in South Khartoum. It was at the end of Khartoum's brief rainy season, and customers had to make their way across the muddy alleys of the crowded suq to reach his shop. Many of the nearby tailoring shops were locked, empty and awaiting rental, or the return of their temporarily absent occupants who were on holiday during the long economic lull following the Muslim year's biggest feast, the eid al-kabir.

Ahmed was 44 years old and had been tailoring since the age of 12. The son of a religious teacher, he grew up in the Gezira in a town known for its spiritual atmosphere. His father was dependent on the good will of his pupils for most of his income, which was supplemented by a small agricultural holding.

Through an exchange of training the father of one of Ahmed's father's pupils gave Ahmed a chance to learn gelabiya tailoring at an early age. His formal education was postponed at this point, and he concentrated on contributing to the family income. Apprentices in those days earned nothing but were given meals and occasionally pocket money. While at this time the tailoring trade in Khartoum was still dominated by foreigners, Ahmed was able to soon make his way to Sudan's third largest town and capital of the Gezira region, Wad Medani, where he was able to find work- again through family connections -operating a sewing machine. Ahmed and many of these "country" tailors, who tend to be older men, said that this is the easiest style of tailoring to learn, accounting in large part for its attraction.

Between 1950 and 1960 Ahmed was able to accumulate enough capital to purchase his first sewing machine, a second-hand manual machine. He paid the dealer 30LS (Sudanese pounds) down and 4LS a month for 10 months for a total of 70LS. Installment payments are very common for both new and used machine purchase and are arranged, in some cases due to Islamic prohibition, without interest payment. Nevertheless, Ahmed eventually fell into debt; he had been trying to maintain a tailoring business in Wad Medani while raising a family in his home town 15 miles away without a daily commute.

By 1975 he had paid off his debt and decided to migrate alone to Khartoum which was beginning to experience something of an economic boom due to the increase in world oil prices and the ability of trained Sudanese to find work in nearby oil-producing states. He was able to rent a shop in a newly expanding market and residential area of South Khartoum but again fell into difficulty when his old machine required extensive repairs for which he was unable to pay.

At this point he accepted the offer of a Khartoum cloth

shop owner who came from Ahmed's home town to do "half work" on one of his machines in the Suq al-Arabi of downtown Khartoum. This was a far better locale for customers and the increase in business probably offset the fact that Ahmed was now renting a sewing machine. Due to the personal relationship that so often intervenes in small scale industries, the owner of the cloth shop eventually lowered his percentage of Ahmed's earnings from half to one-third. This was in consideration of both the personal relationship between the two men and Ahmed's long years of tailoring experience.

Even tailors who work on rented machines generally have much experience in the trade. The survey of 45 tailors working "bi nus" indicated that on average they had 15.3 years of tailoring experience. This is not much less than the 18 years in the trade averaged by the 55 tailors who were machine owners. We can point to the difficulty in escaping debt and the necessity of manipulating personal relations with sewing machine owners as maintaining the subordinate position of many tailors in relation to merchant capital.

The relationship between a "half work" tailor and the owner of his means of production- the sewing machine - is an important one. The cloth shop owner can be absentee or always present, closely supervising the tailor's every transaction and monitoring customer complaints. Tailors are very conscious of the control the machine owners have over their lives. This consciousness is closely related to income. Some tailors say that they make good money in their work, particularly in the busier markets, but complain of the high percentage taken by the machine/cloth shop owner. Other tailors characterized the fluctuations in their income

with the Sudanese expression, "onion days, honey days," referring respectively to cheap and expensive items in the Sudanese diet. Ahmed and the two tailors with whom he works in front of a cloth shop stated that their indebtedness to the machine owner leaves them with little surplus income and not nearly enough to save to buy their own sewing machines.

When asked about their income from half-work, tailors often responded, "I eat what I earn," reinforcing the subsistence image of the trade. From the survey it was learned that the average income from half-work tailoring was about 90LS per week. But 26 of the 40 tailors responding to the income question answered that they made less than 50LS per week. Conversations with tailors in Suq a-Sha'abi, Khartoum, the locus of the largest number of poor tailors, revealed that 50-60 LS was regarded as a very good weekly income and that tailors generally took home about 5LS per day. Daily transportation and meals on-the-job - necessities of urban life- would consume about 1LS of that income. The severe shortage of urban transportation often forces the tailors to take taxis to work, adding further to their daily expenses.

Tailors who rent machines under the "half work" system are forced into transience to search for the surplus needed to purchase a sewing machine. They compete for the limited spaces in the most lucrative neighborhoods and market areas where customer traffic is high. In the preceding case study, tailor Ahmed moves from a rural area to a market

town, to a poor market in the capital, and finally, to a busier market, all the time seeking a larger share of the made-to-order clothing business. Tailors try to position themselves in the neighborhood with the greatest surplus capital/disposable income, but they often lack the power to maintain that position. They are dependent on the whims of personal relations with cloth shop owners or perhaps a relative who owns a stall in Suq a-Sha'abi, and so on. As Duffield (1981, p. 128) states, "The tailor offers a service in a given locality and the remuneration which he receives for this service is determined by the magnitude of the surplus that is generated in that locality". This notion of "circulation" among tailors is an important part of their capital accumulation process and will be detailed further in the discussion of the movement from machine rental to machine ownership.

A more overt type of wage work engaged in by an increasing number of tailors can be called "out working." Typically the half-work tailor is trapped at his machine all day waiting for customers. But tailors who choose to do out working, which is always undertaken on a part-time basis, go to work for large-scale producers of clothing. The principle employer of this type is the Sudan government, which hires tailors to sew military, police, or prison uniforms. Tailors are recruited from the markets, primarily through word-of-mouth, to do piece work in the central uniform shops. This steady work is appreciated by younger tailors

who lack the patience of older tailors in waiting for customers to come to them. The younger tailors are also generally more anxious to accumulate cash quickly for the expenses that are associated with young families.

In this process of government factory outwork, the tailor is provided with cloth and access to a machine, as well as relatively rigid supervision. The use of out-workers points to the inefficiency of the government clothing factories which must use outside, cheap labor in order to meet their quotas. The government is not responsible for worker benefits, paying them only for each piece of work completed. However, evidence of the desperate need of work among this class of tailors was found in the high frequency with which I was approached in the market areas with requests for factory work, having been mistaken for an Egyptian factory owner.

While half-work tailors make up the majority of those working in the trade, the foundation of petty capitalist relations in tailoring is based on machine ownership. It is only from a position of machine ownership that a tailor can begin to expand his production. By establishing control over machine availability and not having to be concerned about tenuous rental arrangements, the tailor can begin to seek control over labor, another elusive factor of production for small scale entrepreneurs. This important problem will be further elaborated in section "B" below, on employment. Building a tailoring business is a step-by-step process

rather than a serendipitous coming together of the necessary resources.

The relative surplus income earned from tailoring in more prosperous neighborhoods and markets is usually put towards the purchase of a manual sewing machine. From the late 1960's to the late 1970's the price of a second-hand manual machine doubled from 50LS to 100LS. The price of an electric machine during the same time period tripled from 100LS to 300LS (Duffield, 1981). At the time of this research the price of a manual machine in Khartoum had jumped to 300LS.

Few new sewing machines enter the Khartoum market due to high cost (over 1000LS in 1983) and duties that are charged on the basis of a "luxury" import at 200%. Those tailors who are able to acquire new machines do so by bringing them home as part of their personal effects after working in one of the oil producing states in the region. This migration in order to earn the capital to start a business has become an increasingly important step in the production process.

Reliance upon loans is another important way in which capital enters this sector. Twenty percent of the sample of machine owners were found to borrow money from time to time. Sources for loans include friends, relatives, and merchants but never the state financial institutions such as banks or government-organized programs. Tailors who indicated a dependence on loans were those working in more lucrative neighborhoods as well as those expanding into

ready-made clothing production where advance purchase of cloth is necessary. Having access to individuals with the surplus cash for potential loans is a resource not available to all tailors, and this varying access plays a part in the social differentiation process among tailors.

After acquiring a machine a tailor may try to acquire his own shop as well, although few succeed in doing so. From the entire sample of tailors only 9% own their own shops while 37% rent space. The remaining tailors, involved in half-work arrangements, are using machines placed on sidewalks and at shop entrances. Tailors who own shops do so in residential areas, where they might have a shop as part of their own house, or in one of the new "People's Markets" at the edges of Khartoum and Omdurman. Space for purchase in one of the city center markets is very difficult to find and is very expensive. One of the corrugated iron shacks or kushuk in Suq a-Sha'abi, Khartoum, on the other hand, can be purchased for about the same price as a sewing machine. The most recent pattern has been that a tailor returning from work abroad with a new sewing machine also has the cash for the purchase of one of these kushuk.

A tailoring business requires certain equipment in addition to the sewing machine, increasing the investment of the tailor. Scissors, tables and chairs, a charcoal-heated iron (electricity service is a problem), and wooden display cases are the major necessities for this business. Tailors in residential area shops are more likely than those in

central business district shops to acquire all the needed equipment because the communal atmosphere in the market encourages some sharing of equipment between nearby, often adjacent tailors. Neighborhood shops are more dispersed.

Marketing techniques employed by tailors who own their shops are a further refinement of the profit accumulation process. Tailors who rent premises are not likely to decorate and make structural improvements to attract customers. Almost all marketing is restricted to sitati tailors who are working in neighborhoods where competition is severe. The women who form the clientele for the sitati tailors, representing all but the poorest urbanites, are restricted by social custom from making excursions by themselves to central markets. However, the neighborhood tailoring shop is a place women can go alone while out visiting friends or relatives in the area. An attractive shop, gaily painted and with the dressmaker's work displayed in the window, serves as a community center for neighborhood women who are potential customers.

Two case studies of tailors who own their machines will be presented in order to illustrate the relative importance of marketing at this level of production and the role of hired labor in this type of shop. The first tailor rents a shop in one of the largest working and middle class neighborhoods of the Three Towns, and the other owns a shop in what the state classifies as a "first class" residential area.

Case Study B: Siddig, sitati tailor in Thawra, Omdurman.

Siddig has rented his dressmaking shop since 1981. The owner of the shop, a tailor who has expanded his trade elsewhere, decorated the simple building with female characters from Sudanese folk tales and Siddig benefits from this colorful advertisement. There is one other sitati shop on his block in crowded Thawra ("Revolution"), the large working and middle class residential area north of Omdurman. Siddig says that this particular neighborhood has a weak demand for dresses, and he has few customers from outside of the area.

Nevertheless, Siddig is considering hiring an experienced tailor to help him with the Ramadan rush. Women and men generally buy new clothing for the holiday that concludes the Muslim month of fasting. He says that such help is hard to come by because most young men who are without access to a machine in the Three Towns have either given up tailoring or have migrated to the Gulf. In any case Siddig says that he actually cannot afford to hire an assistant, and this idea and the thought of opening a bigger shop are just part of his long range plans.

Siddig began his tailoring career as an apprentice for two and one half years in the Suq al-arabi in Khartoum's central business district in 1969. He was then involved in a half-work arrangement at a cloth shop in Khartoum North. He left that job when he was recruited by the Sudanese agent of a Saudi entrepreneur who hired eight Sudanese tailors for his ready-made operation in Jeddah, Saudi Arabia. Working in that position for five years, he was paid 1,200 Saudi rials per month. His expenses were few in Saudi Arabia, but he did remit a great portion of his income to his family in Sudan. He purchased a new sewing machine before his return to Sudan in 1980.

Siddig said that the women who visit his one-man shop are very demanding. "They will take their business elsewhere if I'm not here to greet them when they pass by." He said that there are three other important points to remember in trying to attract trade in this neighborhood: 1) well-made garments are most important in attracting regular customers; 2) location is important (and he claims that a central market would be better than this residential area); and 3) when you promise to have a dress ready by a certain date, make sure that it is ready. He offers his customers three different delivery time frames: three days rush, one week, and ten days.

Customers select a design for their dresses from the pages of a few European fashion catalogues he has on hand.

Siddig said that the most successful sitati tailors have the most recent catalogues. When asked about the impact of the rising number of dresses imported into the country he claimed that this has little effect on his business. "Women in this neighborhood cannot afford imported clothing," he said, "and I can reproduce any European dress better and cheaper."

Case Study C: Moussa, sitati tailor in Khartoum II.

Khartoum II is one of the city's most expensive residential areas and is home to wealthy Sudanese, including many members of Sudan's small Coptic community, and expatriates. Moussa's attractive showroom is well stocked with the latest European fashion catalogues and features a dusty mannequin in the window modeling one of Moussa's creations. While Moussa stated that business was good, the ability of women in this area to buy imported dresses does have a negative impact on his trade, in contrast to Siddig's situation.

In order to preserve his business with the women of the neighborhood he maintained extensive notebooks with sketches of the dresses he has made. Attached to each sketch was a swatch of the material used so that his customers were able to avoid duplicating each other's outfits.

A more important aspect of Moussa's business was that income he was able to extract from the relative wealth of the neighborhood allowed him to expand his production. He employed, at the time of this research, an apprentice, a trained assistant, and, significantly, a woman to sew dress hems. This woman was a widow from a poor neighborhood south of Khartoum II. She could be found several days a week sitting in a corner of Moussa's shop, dressed in simple country clothing and working with a gaudy party dress in her lap. Moussa paid her 0.75LS for each dress completed.

With a woman to do hems, a trained assistant to do most of the sewing, and a young apprentice to iron fabric and cut out patterns, Moussa assumed an almost supervisory role in the shop. He has seriously considered expanding into ready-made production- non-existent for fancy dresses in Sudan- but lacks the capital to invest in advance purchase of the required materials. The scarcity of trained help would also be a problem because, he said, he would need five assistants to run such a production line. He said that he would be willing to train men with only limited experience but that even they would be hard to come by in Khartoum due to the attractions of migration and the lack of interest in small scale tailoring. This problem seems to be caused partially by poor communications- the inability to spread word of work to the right individuals -in that he is paying

his current assistant the very good wage of 10LS per day worked.

Moussa has worked as a tailor for almost thirty years, fifteen in this Khartoum II location. He is a primary school graduate and served a lengthy, five year apprenticeship in the trade.

From the data presented in these two case studies it appears that, with an increase in production and capital accumulation, some tailors begin to consider diversifying their businesses. Diversification can be limited by lack of capital, lack of access to cheap labor, or lack of demand for a particular product in an area that also lacks transportation infrastructure. We found that older tailors who own their shops and are working in poor neighborhoods often add a small grocery business to their biladi tailoring. The shop then offers a range of basic goods such as onions, toothpaste, laundry soap, potatoes, tea, sugar, as well as tailoring services to the surrounding neighborhood. Tailors with much greater access to capital would consider either adding a retail cloth trade to their tailoring service or abandoning tailoring all together in favor of full-time cloth retailing. The latter direction is followed by a few dozen of the wealthiest merchants in the central business districts of Khartoum and Omdurman.

A convergence of youth and surplus capital often signifies that the successful tailor will diversify into ready-made clothing production, the most important transformation that the Sudanese small-scale tailoring industry has seen. The survey of tailors revealed that the

average age of tailors who had some involvement with ready-made production was 30.4 years while for all tailors the average age was 35.7 years. Establishing a production line, pulling together the raw materials, and finding the labor are the difficult tasks faced by the ambitious ready-made producer. Older tailors have not shown as much interest in ready-made production, what many viewed as the production of inferior quality clothing. Establishing a ready-made clothing operation would also require a drastic change in patterns of work.

At the same time, those young men who are attempting to operate a ready-made clothing business do have tailoring experience; they are not entering the trade as newcomers. This points to the rational tendency to invest in a business with which one has experience. We saw older tailors investing in cloth retailing partly due to the status of and traditional preference for trade but also because of the obvious links between the cloth merchant and tailors.

While ready-made clothing producers continue to work within the familiar realm of tailoring, there are significant changes that face the entrepreneur in establishing such production. One change is the speed with which this transformation is taking place. We can look back less than fifteen years to the origins of ready-made clothing production. As recently as 1970 Sudanese boys were still wearing the "national dress" of gelabiya and turban to

school. When the regional oil boom occurred in the early 1970's, Sudanese labor was in demand abroad and returning migrants brought home new urban clothing tastes and consumer demands. Western style pants and shirts became accepted school attire, and boys required tailoring services to have these outfits made. As the clothing was in uniform style and colors, it was more efficient to manufacture it in bulk. As bulk production became commonplace, boys no longer had to buy cloth and take it to a tailor to have a uniform made. Merchants and peddlers were buying an assortment of sizes from the incipient ready-made producers, and the clothing could be found on every corner of the main markets.

The relations of production that characterize the ready-made trade are a second important change in tailoring. Here we see the very individualistic craft of made-to-order tailoring being rapidly transformed into ambitious, production-line type work. This requires a change in employment patterns with the entrepreneur becoming more of a manager and less of a hands-on tailor. He begins to hire workers to sew for him, working for wages or being paid by piece completed. Each worker is affected by this streamlining of the traditional tailoring process, experiencing increasing exploitation under harsh working conditions. The pace of work is intensified in order to increase the accumulation of capital by the workshop owner.

While I observed that made-to-order firms were generally one-man enterprises, my survey of ready-made shops

in Suq a-Sha'abi (Omdurman) revealed that the 30 ready-made firms there had an average of 2.8 employees. The workers, at the same time, are those who are forced to seek such work because they are not able to maintain their own businesses. It is the labor process as much as clothing production itself that is being radically transformed through innovations such as ready-made clothing production. The changing employment patterns in this type of tailoring will be elaborated in section "B" below.

A change in consumer preference is another important reason for the development of ready-made production. The urban consumer increasingly wants convenience in his shopping. To have a garment made by a made-to-order tailor one must first buy cloth and take it to a tailor for measuring. The customer returns at a later time to pick up and pay for the tailoring. The ready-made producers generally sell their product wholesale to merchants, who then sell the garments to the public. Ready-made producers tend to specialize in undergarments or women's simple "house dresses" or school clothing, partly due to the current small size of ready-made operations. The Sudanese consumer traditionally demands good quality in his tailoring, but the clothing produced by ready-made tailors- quickly made and of low quality -is not generally worn as street clothing today, or is worn by very similarly attired school children. At the same time the individualistic attitude common among independent tailors

endures in the new ready-made trade: many tailors, when asked why they switched to ready-made production, mentioned that while one must watch constantly for customer satisfaction in made-to-order work, clothing is manufactured in bulk in ready-made production and the customer can "take it or leave it."

The subtlety and the small size of the changes taking place in tailoring belie the enormity of the subsequent social transformation in the workplace. Relatively small amounts of capital, labor, and equipment make the difference between the two production processes. The ready-made producer is able to exploit this difference through the resources available to him. One person with tailoring skills is unable to obtain access to a sewing machine and so goes to work for wages in the shop of a ready-made clothing producer. The concentration of younger tailors (under the age of 32) working for wages in ready-made production would seem to indicate the direction of change in the trade, away from "half-work" or "independent" made-to-order clothing production.

Before a tailor can begin to produce ready-made clothing he must accumulate the capital necessary for bulk purchase of the needed materials: a bolt of suitable cloth, thread, buttons, etc. At the most basic level we saw tailors using their savings to make a day-trip on the bus to the Gezira town of Hassaheissa where there is a large cotton textile

mill. A bolt of the simple white cotton cloth used for the arage "undershirt" worn under the gelabiya could be purchased wholesale for under 60LS. The tailor would then return with the cloth to Khartoum and set to work fabricating these popular undershirts, which could be sold for about 5LS. More advanced production involves more expensive cloth and/or different colors, of cloth but at the time of this research most ready-made producers were not manufacturing more than one type of garment.

While we have tried to focus on the social dynamism within the informal sector, it is at the stage of ready-made production that we see a surge in factor inputs from outside of this sector. Capital in the form of loans is more readily available to the larger ready-made clothing entrepreneurs from government financial institutions. Tailors who have demonstrated considerable success in the ready-made trade are eligible for "loans" from the Faisal Islamic Bank, an institution backed by Saudi interests. This bank actually terms these loans as "joint venture agreements" (al musharaga) because the bank asserts that it follows the Islamic interdiction against "usury" or interest payment. In any case, such ventures are only available to those entrepreneurs who have shown a good profit, and most of the assistance is in the area of importation of expensive equipment. None of the respondents to this survey were aware of the existence of such financial assistance, a lack of knowledge which attests to the more advanced level of

production of Faisal Islamic Bank's customers. Capital from the Faisal Islamic Bank is available only to the larger producers, those who can demonstrate that such an investment is free of risk to the Bank.

The most successful ready-made producers are not only monopolizing access to capital and labor, they are also occupying the most lucrative commercial space. This is related to the circularity that was described above as a key to the expansion of tailors' production. A tailor may accumulate the surplus capital needed to establish a ready-made firm but, if he is unable to move his enterprise to one of the more important urban market areas, he is then confined to the highly competitive and crowded market of the poorer tailors, such as the "People's Markets" at the edges of Khartoum and Omdurman. The effect on the trade is that the producers have little space in which to display their ready-made garments or in which to store inventory.

The case study that follows offers an example of ready-made tailoring, illustrating both the tailor's ability to make a profit and the limits to his further expansion.

Case Study D: Omer, tailor of ready-made clothing, Omdurman.

While entering the ready-made clothing workshop of Omer in the Suq al-Kabir in Omdurman and walking around the narrow space, one's head constantly brushes against men's pants displayed hanging from lines attached to the rafters. Omer has expanded what was once a made-to-order men's clothing business into ready-made production without changing his locale. He did, however, eventually take over the shop next door and tear down the thin wall in order to double his small space. "I'm seriously considering moving

out to the new Suq a-Sha'abi (on the edge of Omdurman), but that area is inconvenient for my customers," he says. The Suq al-Kabir in Omdurman's central business district is very much a national market and is a good place for Omer's largely wholesale business.

Omer has been in the tailoring business for 32 years and started as a biladi tailor in this same market. Since 1962 he has considered himself more of a merchant because he has concentrated on the cloth trade. When boys' school uniforms came into demand in the early 1970's, he put his two areas of expertise together and became one of the Omdurman market's first ready-made producer-dealers. The cloth that he uses for the manufacture of school uniforms is imported and he personally shops around to get the best price on cloth from area merchants. He says that he has never been able to find a bank that would support him with a loan for his small business, so all of his expansion has been built on his own profits.

It is clear that much of his profit is derived from the low wages he is able to pay the four young tailors, plus an apprentice, who work for him. The apprentice spends the work day cutting out pieces to be sewn and ironing finished garments. He passes the pieces to one tailor who crudely assembles them on a manual machine. Two tailors at electric machines do the final sewing, seams, zippers, and hems. One of the tailors who works an electric machine keeps close watch over the production but Omer is almost always present as well to supervise. He pays his workers exclusively by piece completed.

As Omer's customers are generally small-scale clothing retailers from both the Khartoum region and from outside of the capital it is important that he be there to welcome them. Retailers might come to him from Shendi in the North or Kosti to the south looking for bulk purchases. Such merchants only visit this national market on a monthly basis, so they look to Omer for good prices and the latest news.

The pants are sold for about 30LS a dozen. Some ready-made entrepreneurs who are making men's (non-school) pants are beginning to add labels to the rear pocket with such English names as "wolf" or "jazz" in order to compete with the growing demand for imported clothing. Omer, who is thinking of expanding into the production of simple women's dresses, does not feel threatened by imports. "All that clothing is coming from China," he says, "and the Sudanese body is much different from the Chinese body: the imported clothes do not fit right."

Through our discussion of management issues in tailoring

and in the illustrative case studies we have described the foundation for the capital accumulation process in this trade. The relations of production in which most tailors are involved have been identified in conjunction with the ready-made clothing innovation that is dramatically changing production and altering labor patterns. The next section of this chapter, detailing the expanding types of wage employment in tailoring, will build on this understanding of how tailoring is organized in urban Sudan.

B. Employment/Wage Labor

The preceding section examined the organization, expansion, and diversification of an important urban small scale industry. Our focus was the tailor himself - as struggling entrepreneur - seeking access to the means of production. The successful transformation of tailoring from made-to-order to ready-made clothing manufacture was seen to depend to a large extent on the use of cheap labor. In this section we will identify that labor and describe its work. Over a short period of time the tailoring shop with its new division of labor has become an important example of stratification in the African city. Classes are emerging to take on the jobs that are the product of the capitalization process.

Patriarchy and paternalism have marked most aspects of social life in Sudan with the welfare of the community

always taking precedence over that of the individual. Such behavior was appropriate in a situation where the social organization of work depended primarily upon family labor. To the limited extent that additional labor was needed in tailoring, the family was relied upon in that trade as well. But today, under the pressures of urban life and increasing market scale and competition, the veneer of paternalism has shown considerable wear in the workplace of the tailor. The urban economy offers some mobility to the children of petty producers. Therefore, the children of poorer tailors particularly are less likely or able to seek work in the family's business. The tailor at the lowest levels of production must then cast the recruitment net farther to hire the newest unskilled migrants, those from Sudan's peripheral and poorest regions in the South and West. At higher levels of production, the tailor will employ those whom he can find among those who have not sought employment abroad.

A primary reason for the shift in social relations in tailoring is that small scale industry takes on the burden of creating jobs that are not available in large scale manufacturing. It is cheaper for the capitalistic interests to allow the widespread expansion of small scale tailoring by petty producers than to invest in the heavy industrial production of clothing. As more and more urbanites and migrants seek work, the little work that is available to them in petty production must be divided among more people.

Production is split into a greater number of tasks and each smaller task is compensated for with correspondingly small wages.

The most familiar division of labor in tailoring was described in the last section as "half-work." Urban tailors as employees/machine renters are increasingly specialized as makers of mens, womens or traditional clothing. While they have entered the trade aspiring to machine ownership and independent entrepreneurship, these tailors most often spend their entire careers as employees of the merchants who own their sewing machines.

These half work tailors make up the majority of people working for wages in the trade. They are also paid the highest wages among those so employed in tailoring. Complementing this workforce and often employed alongside of half-work tailors are four other layers of wage workers. This differentiation is a new phenomenon in the urban market and appears to be becoming a permanent part of the organization of tailoring production. The differentiation that is being made apparent through these new productive roles can be classified in two ways: 1) the relative possibilities for these workers to succeed to independent entrepreneurship, and 2) the income generated by their work.

The individuals assuming these roles cannot be found in discrete locations but rather are working side-by-side in what are often barely distinguishable jobs. Careful examination of each worker's relationship to the means of

production makes their social status more clear. But the atmosphere of the urban sug created by Sudanese paternalism can mitigate the effects of class conflict. Mid-morning in the market may find tailors, cloth shop and other merchants, apprentices and other workers, passing customers, and vagrants sharing a communal breakfast of foul, bread, and tea. Later, while the tailor is bent over his machine, he will find himself surrounded by young men looking for work, steady or otherwise. These men pass the time, listen for word of work, or closely observe their friend's skill hoping to acquire some of it without actual practice. Finally, it is time for duhur, the mid-day prayer. In preparation for this prayer, almost every male present in the sug will form a straight line- without regard to social rank- behind a chosen prayer leader. The social distances between men are temporarily submerged in the religious culture.

Class relationships between workers may be vague in the generalized atmosphere of the market, but within the workshop the social order is in little doubt. In this sample, virtually no family labor was employed in the tailoring shops, and only one tailor indicated that he had hired a relative. Of the 49 machine-owning tailors responding to the survey question "how many people work for you in your shop?," 16 or 32% said they had no employees, and the remaining 68% said they had an average of 1.7 employees. In this case "employees" implied any occasion

of hiring, not necessarily full-time. As a matter of fact, the 34% of surveyed tailors who said they had one employee indicated that this person would be hired only on a work-available basis.

What kind of work are those individuals hired by tailors doing in clothing production? While we will examine the dramatic change in apprenticeship in tailoring in the next section, it should be mentioned that apprentices are included as a significant portion of the tailoring wage labor force. Formerly, apprentices were not paid, but today's apprentices in tailoring- who must go to extraordinary lengths to learn the trade- are given small "allowances" of between 5 and 10LS per week plus daily breakfast. Twenty of the surveyed tailors indicated that they had an apprentice, but we actually saw only 15 youths so engaged during the course of this research.

Piece work employs a significant portion of the wage labor population in tailoring. Two kinds of piece workers engage in clothing manufacture in urban Sudan: those who perform what is actually called "piece work" (bi gata'), and those who are referred to as "skilled workers" (sanay). There appears to be little difference between these two labels; however "piece workers" are generally found in ready-made production, and sanay are usually employed in the made-to-order trade. Also, sanay workers are sometimes paid per day worked rather than by the piece but the latter method of payment is more common. As the sanay worker is

employed in made-to-order work with direct customer contact, it is easier for him to develop a reputation and perhaps, accumulate the capital needed for him to open his own shop than it would be for the piece worker involved in ready-made (and anonymous) production.

The expansion of tailoring has depended a great deal on the piece work system because labor is one of the few inputs under the control of the producer. Portes and Walton (1981) state that the piece work system is advantageous to capitalists because the burden of production error and work hazards are placed on the worker. The entrepreneur will not pay for a mis-stitched garment, for example, under this system. However, in Sudan's ready-made tailoring shops we found the situation somewhat less harsh with these very small scale producers taking responsibility for all the problems of production. The worker is not charged for sewing mistakes, and the somewhat careless production methods that prevail invariably mean that even poor quality garments end up for sale in the market.

The predominance of piece work positions in tailoring as opposed to full time or steady work is an indicator of the instability of the trade at the present time. Again, when asking piece workers about their income, we hear the expression "yom fi, yom mafi" ("somedays you make money, somedays you don't"). While tailors usually hire the same piece workers whenever they have work, the piece worker must be present when the work is available. Entrepreneurs at

this level of production are not making commitments to their workers. The ready-made trade is such a new phenomenon that it has not had the time or financial success required to institutionalize patterns of production. Wages, however, have been fairly standardized, with most piece workers saying that they are paid one Sudanese pound for each garment completed in afrange work and half a pound per garment in the production of gelabiyas.

The intensification of tailoring production has also provided increasing opportunities for women in the trade. Of course women have long played an important role in home production of clothing, but the trend towards hiring women to do hems on a piece work basis is a new phenomenon. Such work is known as amud which refers to the double-stitching of hems, a mark of a high-quality garment.

There is much diversity in employment arrangements even within this group of amud workers. In the Suq al-Arabi of Khartoum's central business district, for example, there is communal use of amud workers by the half-work tailors in this market. The out-of-work youths who spend their days in this sug can pick up amud work from tailors with rush jobs. In tailoring shops closer to residential areas we found divorced, widowed, and aged women hired to do amud work either at home or while sitting in a corner of the shop. In one old neighborhood of Omdurman all the amud hemmers are the widows of Egyptian merchants and workers who formerly dominated Omdurman's commerce. Finally, in the Suq a-Sha'abi

of south Khartoum there is no amud work available because these poorer tailors cannot afford to split their income with extra workers. Amud workers are generally paid one pound for each garment hemmed. While this may appear to resemble piece work wages, it is even less steady than piece work, available only during production rush periods. The following case study details the work day of an amud worker and his view of his prospects in the trade.

Case Study e: Hassan, amud worker in Suq-al-Arabi, Khartoum.

Hassan has had several jobs since he left school following his failing the higher secondary entrance exam, but he claims to like amud work because it leaves him time to look for steadier employment. He learned the careful hemming of men's pants and shirts by watching a tailor friend in the suq who eventually hired him during holiday rush periods.

He says that he can hem five or six pairs of pants per day, if there is work. A working tailor, in contrast, would usually only have time to hem one or two pairs of pants due to the other demands of the job. So while the tailor must pay Hassan out of his profits they both are able to benefit because production is increased.

Hassan is studying in the evenings and hopes to take the school entrance exam again. He has no interest in becoming a full time tailor, although he has been offered piece work in the new Suq a-Sha'abi in Omdurman. He would need to spend much of his income on transport if he took that job. For the time being he is content with occasional work with his friends in Suq al-Arabi.

In order to assess potential for employment in this changing trade, tailors who owned their machines were asked if they would like to hire more workers like the amud worker described above. While almost every tailor said that such

skilled labor was not available in Khartoum, 78% said that they could not afford to hire anyone. The remaining 22% said that they would hire an average of two workers if they were available.

Our discussion in this section has shown that tailoring is expanding, but only through the use of cheap labor. There seems to be a decline in opportunities for independent entrepreneurship in the trade, and an increase in the availability of part-time work, involving only bits of the tailoring process. The next section will describe apprenticeship in detail, an important aspect of employment in tailoring, as well as its training phase.

C. Apprenticeship

A consideration of the changing structure of apprenticeship training tailoring presents another perspective on both the employment and management issues in the trade. Apprenticeship, as it currently survives in tailoring, is an important part of the cheap labor system that is essential for the expansion of production under conditions of scarce capital. For this reason it may seem that there is little difference between the "apprentice" and other forms of wage labor in tailoring; however, understanding changes in the trade requires a specific examination of the apprenticeship system for three

reasons: 1) apprenticeship training has played an important role in the brief history of the trade; 2) tailors still make a distinction between their apprentices and other wage workers; and 3) a discussion of apprenticeship here provides an interesting contrast with the subsequent chapters' discussion of apprenticeship in carpentry and metal working, where apprenticeship survives more intact.

In the survey of tailors I found that 96% served an apprenticeship for an average of 2.5 years. But even one generation ago it was clear that this trade was undergoing significant changes in the way it reproduced its skill: only 42% of the sample said that they had served their apprenticeship with a relative, and only three tailors indicated that they had apprenticed with their fathers. Skills have been traditionally handed from father to son in the crafts, developing human resources that were essential to the economy. But the majority of today's active tailors are first generation urbanites who left farm families to learn a trade outside of the household.

Under the pressures of intense competition and diversification in the trade, the present generation of tailors has little interest in preserving knowledge or the transmission of skill, orientations associated with apprenticeship under non-capitalistic circumstances. In today's economy, the apprentice or young man who wants to learn the trade bears the complete burden of separating elements of the skill from the problems of survival faced by

his "master" tailor; in other words, this trade is largely self-taught. Learning the trade is a difficult task because even under the best conditions tailoring, unlike carpentry or metal work, does not require much "assistance" in its execution.

The master made-to-order tailor, while trying to preserve a notion of quality handicraft for the satisfaction of consumers, actually disparages his own skill. When tailors who were observed during the course of this study were asked to rank their skill with those of other petty producers such as auto mechanics or carpenters, they generally placed themselves at the bottom of the list. With this kind of self-image, training the nation's future skilled workers is far from the economically-pressed tailor's mind. Given these circumstances, it is not surprising that it was difficult to find tailors who said they were engaged in the training of apprentices.

The boys whom I was able to identify as tailoring apprentices find such positions on their own. No longer do fathers take their sons around the neighborhood in search of a training position, and no longer do tailors seek out the sons of friends and relatives to serve in their shops. Only eight of the eighteen apprentices currently employed by tailors in the survey were related to the tailor. The remaining ten apprentices were youths who had migrated from either the Gezira or western Sudan on their own in search of work. Poor and lacking marketable skills

and urban contacts, apprenticeship in tailoring was all they could find. These youths generally indicated that they would not choose tailoring if alternatives existed.

Most tailors, particularly those involved with rental of a sewing machine, stated they could no longer afford to hire and train apprentices. A typical comment was, "Apprentices are only learning. They can't do much for me and yet they expect to be paid. I have enough people eating out of my pocket." The fluctuating consumer demand for hand-sewn clothing under the influence of both the ready-made trend and the importation of clothing affects the ability of these entrepreneurs to hire extra workers.

Those tailors who are able to employ apprentices, paying them less than any other level of wage laborer in tailoring at an average of 5LS per week, use such labor to control their costs. Apprentices are most often found in sitati or women's tailoring shops where they learn to sew buttons, zippers, and hems but are primarily used for cleaning the shop, errands, and ironing of material and completed garments.

The tasks to which today's tailoring apprentices are assigned are simple ones that do not teach the fabrication of an entire garment. Facing intense competition from their crowded trade and the shortening of time spent in apprenticeship, tailors attempt to limit new entrants to the trade. At the same time sitati tailors have rigid requirements for prospective apprentices, aimed more

at sharpening their sales than at setting standards for training. The tailors frequently mention obedience, responsibility, honesty, and good manners or "morals" as being important characteristics of apprentices. The latter traits are important in a business that serves a female clientele.

Competition also accounts for the absence of the paternalistic relationships that frequently characterize other small scale manufacturing activities such as carpentry and metal working. The tension found between tailors and their apprentices is a mark of the movement tailoring has made toward capitalistic, labor-divided, production-line type work. At the same time, it reveals the decline of a system where the apprentice was a learning-laborer and the master protected the apprentice with food, shelter, and training. In conversations with tailors, they frequently noted that tailors from Southern Sudan maintain the "traditional" relations with apprentices in their shops, such as in training relatives and providing food and shelter for them. The Southern Sudan has long been the most peripheralized of Sudan's regions with relatively low levels of socio-economic and institutional development. Duffield's research (1981) has indicated that such paternalistic arrangements among tailors are disappearing even in rural Northern Sudan.

Despite the difficulties in obtaining skill training in urban tailoring, there is evidence that boys are learning

the trade. The swift changes in and crudeness of today's market tailor training are part of the new phenomenon of ready-made production. The following case study illustrates the impact of these changes on one young migrant.

Case Study F: Waleed, sugi producer, Suq-al-Arabi, Khartoum.

Waleed, age 16, joined the exodus of young men from dessicated farms in Darfur two years ago. He has a cousin who works as a tailor in Suq-al-Arabi so this was a natural terminus for his trek. Waleed quickly learned however, that his cousin, who was a half-work tailor, could not support him except with occasional amud work. He had never held needle and thread before coming to the city, so he was grateful to learn that much from his cousin.

The amud work for his cousin and other tailors in the suq did not provide much income so Waleed sought other forms of work. In the nearby grain market there were opportunities for boys to earn money by pushing carts filled with customer purchases from the shops to other transport. Back in the tailor's suq he invited by a group of amud workers to join them in purchasing a bolt of cloth for the production of arage, men's long "undershirts."

This kind of clothing is called sugi after the "suq" or market where it originated. At the same time, the term sugi is used by regular tailors to indicate work of inferior quality. The boys bought a small roll of the loose-weave cotton cloth popular for this light garment, borrowed scissors from the working tailors, and sat on the ground in the middle of the suq to produce a few garments. Each shirt was partially hand sewn and partially machine sewn, using the machines while the half-work tailors were absent. The garments were then immediately taken out on the street to be hawked by their manufacturers and sold for 5LS a piece.

These boys meet an urban consumer demand for cheap underclothing and also satisfy their own need for training by teaching themselves, albeit crudely. The boys are usually able to find work eventually in ready-made or piece work situations. In the short history of this development it is doubtful that any youth has been able to purchase the major means of production, a sewing machine, through such work.

Waleed's story provides an interesting case of labor

being transferred from household production in an agricultural economy to the commercial sector in a relatively short period of time. Within the commercial sector such youths are transformed into cheap wage labor. Their lack of literacy and numeracy skills and the absence of thorough skill training combined with the general conditions in the economy, severely reduce their chances to succeed at independent entrepreneurship.

Faced with their own pressures in a difficult economic period, the working tailors are also declining responsibility for the reproduction of skills in their craft. Social relations within the workshop have shifted, and the boys entering the trade are no longer seen as heirs to entrepreneurship but as laborers for their competition, that is, larger scale clothing production. The state colludes in the decline of traditional apprenticeship training by not encouraging the maintenance of this important training mode.

D. Spatial Concerns and Relations with the State

Our interest in the preceding sections of this chapter has been to detail the internal dynamics of urban tailoring. In this section we look outside of tailoring to examine the conflict between these petty producers and the class interests represented by the Sudanese state. These two

concerns, space and the state, come together as we consider attempts by the state to control the informal sector. This control is largely exerted over land, a surprisingly important factor of production to businesses that take up so little space.

In our discussion of management of the tailoring firm the concept of the "circularity of production" was introduced. Circularity describes the attempted movement of tailors from suq to suq in search of the highest possible rate of profit. But this process is very much influenced and even controlled by the state- primarily through the agency of local government- which determines where tailors may and may not set up their sewing machines.

Tailors generally voice a strong preference for one market area over another; hence, there is a "hierarchy" of markets from the tailor's perspective. However, this hierarchy has been as much a creation of the state, and particularly the colonial state, as it is a reflection of tailors' preferences. Throughout British-ruled eastern and southern Africa, regions of relatively large white settler populations, commercial areas were divided into European and "native" sectors. While Sudan did not have a significant European settler population, the central business district of the capital Khartoum was divided into a "Suq-al-Afrange" or "foreigner's market" and "Suq-al-Arabi" or "Arab Market" where the two groups could engage in commerce separately.

In independent Sudan this division is still reflected in the downtown markets. Khartoum's most expensive shops, primarily selling imported goods and offering European-style tailoring services, are located in the Suq al-Afrangi, while across Republic Street the Arab Market deals primarily in cheaper imported goods and locally-produced goods and foodstuffs, as well as half-work tailoring. Twenty years ago the Arab Market sold Sudanese products almost exclusively.

A more important market contrast than the Afrangi-Arabi dichotomy would be to compare Omdurman's Main Market with the Suq al-Afrangi. Omdurman, the Mahdi's capital, was a large African town before the arrival of Europeans and remained the principle "native quarter" during the colonial era. Its market, a major stop in the trans-Saharan trade, is characteristic of African-Near Eastern bazaars. Today this market is the "Suq al-Kabir," a national market with an emphasis on trade. Tailors are squeezed into every available space in this suq and provide an important service to local and visiting merchants and consumers.

State intervention has effected all of these markets and has also resulted in the creation of new ones. The impact on the informal sector in general and on small scale tailoring specifically has been to shift trade from areas where producers were responsible for their own affairs to well organized/supervised centers of production. This trend coincides with the transformation in tailoring from

made-to-order to ready-made production. Ready-made manufacturing requires more organization and space than the made-to-order trade. More labor and capital are also required. The end result is an easier source of revenue for the state through taxation. The made-to-order tailors are more difficult to enumerate, regulate, and, hence, more difficult to tax. Ready-made producers, increasingly located in the new government-built markets at the edges of the Three Towns, are systematically taxed at the sales end of their businesses.

The ready-made producers are locating in these new "People's Markets" (Suq a-Sha'abi) not out of choice but because these markets are the only areas open to them under new urban planning regulations. The government is attempting to eliminate all forms of tailoring from the Suq al-Arabi in Khartoum and from the Suq al-Kabir in Omdurman purportedly for "health and safety" reasons and plans to convert the latter into a market reserved for trade with "manufacturing" prohibited.

In reality these tailors, particularly those perched on the sidewalks of the markets and known as "veranda tailors", were seen as a threat to the state. Veranda tailors are either machine-owners without access to a permanent space or machine-renters. The latter are very dependent on the goodwill of those who own the machines which they use, because these veranda tailors are forced to move the machines from place to place. Veranda tailors are an

independent-minded group an attitude fostered by their precarious situation. The simple form of production that provides them with relatively easy access to employment and income is not viewed by the government as part of a stable work force. These tailors regularly faced harassment from the police force of the local government, the biladiya. While tailors were banned from market sidewalks as early as the colonial era, the government still fights to confine them to more organized market areas. The following brief case study illustrates the veranda tailor's dilemma.

Case Study G: Hadi, veranda tailor, Suq al-Arabi.

Hadi considers himself a law-abiding man and resents the many tailors who continue to flourish on the sidewalks around him while he has given up such work. Instead, he comes to the suq each day with a suitcase of clothing that he has sewn at home. He displays his product on a rack especially constructed for this purpose and sits on a box to wait for customers to pass by. They look at his work, admire its quality and decide to place orders for themselves.

He says that he could open a shop at his home in South Khartoum but the customer traffic is so much better here it is worth the inconvenience. Hadi also avoids most of the overhead costs of machine rental or shop rental by working in this way, not to mention the threat of jail faced by those still sewing on the sidewalks. He and his brother take turns minding the rack while the other goes home to sew orders on the machine they purchased twenty years ago.

Much recent tailoring history in urban Sudan has been characterized by removals. In the early 1970's tailors and other petty producers were removed from the United Nations Square area (near Suq al-Arabi) to the People's Market in South Khartoum; more recently there have been removals from the former Suq Libya in Omdurman to a new Suq Libya, further west in Omdurman; and currently the government is trying to

move tailors from the central Suq al-Kabir in Omdurman to the new People's Market in Omdurman. The tailors resist however, and now United Nations Square is populated by petty traders whose production is even less sophisticated than that of the removed tailors. The petty producer circulates to neighborhoods where he may prosper, and the tailors forced to locate to South Khartoum bitterly resent their removal from a lucrative area with high traffic to one that is frequented by poorer clientele.

These People's Markets on the urban periphery were established in areas that were thought to be in the path of urban growth. Current trends seem to support this planning, however, transportation and other infrastructure were not planned in these areas, depriving producers of customers and needed services. Originally the plan was to limit infrastructure in these outer areas in order to discourage rural-urban migration, but drought and the failure of Sudanese agriculture provided strong incentives for rural people to move to the city.

The People's Markets are stark in contrast to their downtown predecessors. These new market areas are neatly laid out in rows with numbered doors on each stall. Unlike the downtown markets, there are no communal alleys or work areas that can be used for sharing tools or meals. The warren-like Suq-al-Kabir is difficult to patrol, but the new markets have assigned space and each proprietor or rentor has a registration card in the office of the local

government officer assigned to the market. Rent, taxes, licensing, and product information are included on this card.

Not surprisingly tailors have little use for the government when asked what services they would like to have from the it. Nearly 100% of the tailors responded negatively to the survey question on assistance from the state to tailoring production. A few responded that taxes could be lowered or electricity service could be improved, but most wanted to be left alone and thought that there was too much government intervention already.

Tailors tend towards unanimity on the issue of the irrelevance of the state to their lives, and they also tend to agree that some larger economic "force" controls their ability to produce. These feelings are primarily manifested through their frustration in trying to obtain lucrative sites for their shops. Those tailors with "influence" are identified as the more successful of their number. In general, however, the incredible diversity of the tailoring population and the intense competition they face tends to divide them, despite the common features of their sewing trade. The in-group consciousness that does exist derives from the tailors' proximity, the fact that they share the circumstances of the urban suq and are, at times, painfully familiar with each other's troubles.

E. Summary

In this chapter we have described the diversity that exists among Sudan's urban tailors and sought to account for the dramatic changes taking place within this small but important field of production. These changes have contributed to the rapidly emerging class distinctions within what was formerly a less labor divided trade. The question, "who is working for whom?" can be more clearly answered than ever before in regards to small scale tailoring after a consideration of these data. The form of tailoring that was once regarded as independent entrepreneurship is now an important type of wage labor in the trade.

Tailors constitute one group of specialized commodity producers who are part of a complex urban economy. The relative inequality that persists among these producers is due to the lack of access to resources faced by most tailors. Maintaining a tailoring business can consist, at a basic level, of little more than surviving in the big city. At more advanced levels of production labor is hired and permanent access to a sewing machine is established. The surplus of capital reached at profitable levels of enterprise encourages the producer to intensify production in order to meet the increasing urban demand for mass produced clothing. While ready-made production may increase the efficient use of resources, in the short term, at least, we see a decline in product quality.

Work for most tailors has come to mean one of an increasing variety of types of wage labor. Even youths who enter the trade in its training or "apprenticeship" phase find themselves in wage work. The lack of education and influence of these youths, combined with the high costs of establishing a business, severely diminishes their chances to succeed to independent entrepreneurship.

For those tailors who do manage to acquire at least some of the means of production, usually a sewing machine, there are still obstacles to advanced production. It is not a high demand for tailored clothing that has crowded the poorer urban markets with tailors; rather, the monopolization of resources, including desirable space, has ensured that there are few alternative types of work available to them. The informal sector is increasingly subject to open control by the state, as the cheap goods and services of the sector become more important to the maintenance of the status quo in Sudanese society.

Tailors who succeed in using this trade as a bridge to more remunerative work almost always go into some other informal sector service, such as trucking and transport, or trade. With the exception of modest increments in scale among ready-made producers, there are no foundations of large scale clothing manufacture in informal sector tailoring.

The hope for this trade lies in its ability to create useful jobs at relatively low cost. Providing that

employment is meaningful and meets the needs of daily life, the increasing differentiation among those who call themselves tailors should continue unchallenged by political ferment. Alternatively, the protests currently exhibited by the widely divided group of tailors- largely confined to simple acts of defiance -will grow less subtle.

NOTES

1. See World Bank (1978) for more on most common types of urban Third World small scale industries.
2. See ILO's report on Kenya (1972).
3. Sudan Directory, 1927. Information communicated by Professor Susan Grabler.
4. Personal communication from Professor Jay Spaulding, Kean College, 1985.
5. Sudan Directory, op. cit.

**SOCIAL STRATEGIES IN PETTY PRODUCTION:
THREE SMALL SCALE INDUSTRIES IN URBAN SUDAN**

Volume II

by

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A DISSERTATION

**Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of**

DOCTOR OF PHILOSOPHY

Department of Sociology

1987

CHAPTER V

CARPENTRY

Carpenters represent one of the largest and most economically diverse groups of small scale manufacturers in the African urban economy. In Khartoum, at the time of this research, their numbers reached approximately 600 self-employed tradesmen in addition to 1800 carpenters working for wages¹. Anchored in the construction of simple furniture, the carpenter's skill has been applied in recent years to the manufacture of furniture in a more European-style, as well as to housing and general building construction. The permanent demand for such products and services in urban areas has been fueled during the last decade by the economic boom of the nearby oil-producing states. Over a very brief period of time, the carpentry trade in Sudan has seen the infusion of new types of equipment, the demand for new types of products, new marketing modes, and the development of new productive arrangements with labor.

This chapter will use the case study material and the

survey of 52 Khartoum and Omdurman carpenters to describe the process of social differentiation within the trade. In order, briefly, to distinguish carpentry production from tailoring, the subject of the previous chapter, we could point to the larger scale of the final product, which is produced using a wider variety of tools and more expensive materials. Also, while family labor has all but disappeared from tailoring, it is utilized to some extent in carpentry for reasons that will be made clear in this chapter.

The positioning of this chapter between those on tailoring and metalworking, is not meant to identify carpentry as a "transitional stage" in a process from "traditional" production to "modern" industrialization. Rather, we view all of these commodities - clothing, wood furniture, metal products - as being produced along a continuum of dynamic social relations. In terms of average income levels generated by petty production however, carpentry does fall between tailoring and metalwork. This series of studies of three trades, illustrates the adoption of a variety of strategies to generate income and accumulate capital in urban small scale manufacturing.

All three of the trades described in this study experienced the secondary effects of the worldwide rise in oil prices of the mid 1970's. For carpenters in particular, this meant that there was an increased demand for better quality furniture, both to meet the needs of the incoming

expatriate development assistance community, which settled in Khartoum's first class neighborhoods during the late 1970's, and to satisfy the new bourgeois tastes of Sudanese who had travelled and worked abroad.

The carpentry trade also plays a major role in urban housing construction. While houses are built of brick, cement, or a mud-clay mixture in this country where lumber is scarce, carpenters build door and window frames, construct and hang beams for ceilings, and also set the actual frame of the house. Carpenters make the doors and shuttered windows as well, especially for lower class and rural housing.

The exuberant demand for housing construction in Khartoum at all income levels that occurred in the late 1970's and early 1980's is in ironic contrast to the prohibition against building new houses during the late 19th century Mahadiya. The Mahdist state feared, at that time, that people would "hide money in their houses" and deprive the tax collectors (Pons, forthcoming: 137).

An important finding which emerged in the carpentry study and which helps to distinguish carpentry from tailoring, is that in carpentry we see more cooperation among independent producers. This trade lends itself more to cooperation than tailoring in that a wide variety of expensive tools and machines are used in different steps of the manufacturing process, all of which are not necessarily owned by every producer. Sharing of tools is a natural

response to equipment scarcity, particularly in locations where many carpenters work in close proximity, such as Suq Sha'abi or Suq as-Saggana.

The phenomenon of cooperation among producers is closely related to another important trend in carpentry, one which was also identified in the previous chapter's discussion of tailoring. The coordination of production in fewer units by the owner of capital, that is, the integration of labor and equipment to "mass produce" furniture in a single workshop, is instrumental to the phenomenon of "ready-made" production. In carpentry this is a more complex process than in tailoring due to the type of skilled labor required for such production. The final product is also being aggressively marketed by larger carpenters who are establishing their own "furniture show rooms" for direct sales to urban consumers.

The intensification of furniture production also has an effect on labor. In the previous chapter's description of tailoring production we saw how, what appears to be independent entrepreneurship among many tailors, was actually a form of wage labor through the tailors' disguised rentals of sewing machines. In carpentry, particularly among those carpenters with the least profitable businesses, we see a blurring of the distinctions between self-employment and employment for wages. Carpenters will make strategic decisions regarding the generation of income which are dependent on the availability of direct customer orders or

of wage work on larger carpentry projects. In this chapter we will maintain "employment" as a separate and important topic in order to credit fully the wage worker's role in carpentry petty commodity production.

The ubiquity of the traditional wood and rope beds and stools (called anagreb and banaber) in the contemporary urban Sudanese household, provides some continuity with the past for the observer of the carpentry trade in Sudan. However, these furniture items are vigorously produced for the market today along with the more sophisticated articles of furniture. In fact, the specialized nature of the carpenter's skill transformed the trade from household to commodity production prior to the colonial era. Until recent times, despite the commoditization of the craft, carpentry retained careful, intergenerational skill transfer as the principle means of reproducing the trade. The general introduction around 1940 of equipment powered by electricity contributed to the transformation of the organization of production.

The sunt and sidir wood forests of the Nile Valley and the forests of teak, ebony, and mahogany of equatorial Sudan have long provided the materials to support the woodworking craft in the region. The ruins of the ancient civilizations of the upper Nile Vally, the Meroe and Kerma cultures, have preserved artifacts closely related to the angareb mentioned above. The word angareb itself is thought to be of Nubian

rather than Arabic origin, which dates the object to a more distant past.

Both the Nile and Red Sea peoples have produced wooden boats for millenia. The wonderful carved, wooden doors, familiar to visitors to Mombasa, Zanzibar, or Yemen, were also common in Sudan's Red Sea port of Suakin, and can still be found in deteriorated condition on houses in old Omdurman. Artisanry in wood that continues to persist alongside the contemporary production of wooden furniture in urban Sudan includes boat building and the making of gadah (wooden bowls), and pipe stems for the hookah. The latter articles are still produced in urban Sudan today using the bow-lathe, one of the oldest of known tools.

It is remarkable that craftsmanship continues to be a quality held as important by today's urban carpenters, given the significant pressures to change faced by these producers. In this chapter's discussion of the carpentry trade we will describe the retention of craftsmanship and its continuing role in the transformation of carpentry production. To organize our inquiry we will follow the pattern of four major questions introduced in the previous chapter. The first section, detailing the management of a carpentry business, is the most comprehensive because the three other issue areas emerge from an understanding of the firm's organization of production. The questions are, 1) what are the strategies of production in carpentry and how is the carpentry workshop organized? 2) What new forms of

employment are being created in the trade? 3) How is the apprenticeship or training system changing? 4) How does the state use its control over urban space to control or influence small scale carpentry production?

A. Management/Entrepreneurship

The poorest petty commodity producing carpenters shift between self-employment building the crudest furniture for sale on the urban market and working for wages. Typical of the sites occupied by this kind of producer is the Suq al-hashab, the wood market of South Khartoum. It is further from the city center than Suq Sha'abi and thus even more peripheral to the urban economy. Here, carpenters establish stalls, often constructed of discarded doors or plywood for walls and straw matting for roofs. Minimal rent is charged for the use of this space and, sometimes, the carpenter is allowed to use the space rent-free if he agrees to serve as night watchman over the adjacent stores of wood. It is only the crude stalls that are rented because the land itself is owned by the state.

The wood market site is a poor one for attracting a furniture-buying clientele. This multi-purpose market is most frequently visited by carpenters of all income levels looking for recyclable materials, charcoal and livestock merchants, and building contractors. However, the presence

of these contractors often provides the carpenters with opportunities for wage work on large projects. The low income carpenters working at the wood market also have easy access to the recyclable materials which are stored and sold there. These carpenters produce chairs and tables out of discarded packing crates, used shipping pallets, and the remains of large construction projects. Bargaining with the merchants in the wood market is required to obtain these materials, so the poorest producers often are not able to match the prices offered by other carpenters.

The residential areas surrounding the wood market are linked to it in terms of income and ethnicity. The Al-Ushara and Fellata neighborhoods are home to peoples with origins in western Sudan, Chad, and Nigeria (fellata is the name in Arabic of the migratory Fulani ethnic group of West Africa). Most of the carpenters, charcoal makers, livestock herders (the wood market is also known as az-zareeba, "the corral"), and other workers from the wood market live in one of these two adjacent residential areas. Even recent migrants may find relatives in the area, making the wood market a logical place to look for work. However, those migrants who are able to establish a carpentry workshop in the wood market soon after arrival have usually come to Khartoum with skilled trades experiences from their home provinces.

The carpenters of the wood market are almost exclusively from Sudan's western regions and tend to be young, with an average age of 20 in the sample survey.

Generally, they have only worked as apprentices prior to attempting entrepreneurship in the wood market. In cases where the carpenter has help in his shop, these assistants are younger relatives of the carpenter, often brothers who accompanied him in migrating to Khartoum. Their tools are usually parting gifts from the masters with whom they trained, and because they have only a few tools, their product lines are limited. Their workshops are easily assembled and disassembled, signalling the part-time and casual nature of their independent work. In fact, the shops of departing workers often become the material for filling another carpenter's furniture orders or for constructing a new entrant's workshop.

Their poor educational and training backgrounds leave these low income carpenters unprepared for the economic demands of urban Sudan. They are made marginal to the wider socio-economy through the mechanisms of severe competition for materials, space, and customers. However, in comparison with casual workers and metalworkers, the carpenters of the wood market are able to put this adversity to their advantage. The casual workers who frequent the urban market places in search of work drift between unemployment and employment for wages (in contrast to the carpenters who shift between self-employment and employment for wages). These young men are very recent migrants and usually own or have borrowed one or two basic tools of their trade which they display to advertise their skill as they line up in

market areas where contractors seek day laborers.

The other group which helps us to place the wood market carpenters in perspective are the low-income metalworkers, (see next chapter). Due to the scale of equipment required and the immobility of metalwork production, metalworkers cannot be as flexible as the carpenters in their search for work. Their equipment and materials are heavy and awkward in size, preventing the metalworkers from accepting many contract or temporary assignments. Another advantage available to carpenters is that recyclable wood is more plentiful than recyclable materials for metalworking. Such conditions help to explain why we find more low-income carpenters surviving in the urban economy than low-income metalworkers; that is, there is no equivalent to the wood market carpenters in urban metalwork production. It should also be noted that the products of the wood market carpenter's workshop, such as simple door and window frames and wardrobes, are in greater demand among low-income urban consumers than are the most common products of the metalworking shop.

The lowest-income carpenters may be viewed as either marginal to petty production and the urban economy or as flexible producers with a variety of choices. The distinctions between employment and self-employment become blurred at this level of production, a situation well-described by Bromley and Gerry (1979). It is as an attempt, again, to acknowledge the active role of the petty

producer within a subordinate part of the economy, that we emphasize this shifting of status as a compensatory strategy. The low-income carpenter, such as those found in the wood market, strives to accumulate capital in order to succeed to independent entrepreneurship. The obstacles that must be overcome are daunting, but as opportunities open up during the subsistence income generating process, the carpenters do try to take advantage of them. For example, a wood market carpenter may be earning sufficient income to feed his family by independently producing simple made-to-order furniture. In the meantime, a building contractor may visit the market in search of cheap, skilled labor, see the carpenter's work, and hire him for temporary wages on a building project. In fact, these potential opportunities and the desperate need of work among these carpenters has fostered a certain aggressiveness as an economic survival strategy. It is not unusual to observe carpenters approaching contractors and other visitors to the market to ask for work. This is remarkable in that the patriarchal aspects of Sudanese society discourage young people from making such requests of older men.

When the carpenter is able to obtain such project work, he will earn steady wages over a short period of time, always an improvement over the slow, made-to-order business. The carpenter is able to return to his workshop at the project's end with the cash for an investment in superior tools, supplies, or for family necessities. We speak of the

continuum of productive relations based on such examples, because a small increment in resources can boost the entrepreneur to a higher level of production.

Quantifying the subtle distinction between employment and self-employment among these producers is a difficult task. Evidence of the distinction comes primarily from monitoring the carpenters' activities and questioning them about their work preferences. We can also determine the direction of the trend by looking at income from the respective activities. While much of the carpenter's work consists of constructing window frames for low-income housing, the major article produced by wood market shops is the dohlab (wardrobe), an essential piece of furniture in this closet-less country. The wood market dohlab is made-to-order for an average price of 80 LS which is 30 LS above the cost of the materials. Wood market carpenters average only one or two dohlab orders per month, so even temporary work on construction projects is preferred. These projects, ranging from building shelves for a new shop to working on a housing construction crew, pay the carpenter on a completed work basis, or weekly if of long duration. Most of these projects pay about 50 LS per week to carpenters with skills of this level.

The shifting back and forth between employment and self-employment experienced by the low-income carpenters reflects the cyclical nature of the construction industry in Khartoum. Building materials shortages, rising and falling

remittances from workers abroad, the fluctuating price of oil, and a generally unstable economy are all factors influencing the vigor of the construction industry. The wood market, with its emphasis on construction materials, is a new area of development in the urban system and is also dependent on these larger forces. The recent growth of this new market, with young men establishing crude shops even outside of the market's dusty perimeter, indicates both the desperate need for work in Khartoum and the lure of the limited success that some of the wood market entrepreneurs have had in finding more stable work.

To the north of the wood market, yet still on Khartoum's periphery and near a "third class" residential area, is Suq Sha'abi, an important site for small scale carpentry production. Suq Sha'abi was intended to serve a temporary function, supporting petty producers-including tailors - who had been evicted from downtown Khartoum in the early 1970's. The vast market serves a growing population area however, a pressure that tends to make the market permanent despite official prohibition.

There were approximately 70 carpentry workshops in Suq Sha'abi at the time of this study, and 18 of them participated in the survey of carpentry. Housed in corrugated iron shacks, these carpenters produce a more complete line of furniture than wood market carpenters. They are also more integrated into contract work and

production of ready-made furniture than wood market carpenters. A few of the Suq Sha'abi producers have been able to earn a relatively high income, some claiming monthly earnings as high as 800 LS in customer sales and contract work. The major constraint for producers at that income level is their inability to obtain workshop space in one of the officially recognized industrial areas. For all Suq Sha'abi producers the average monthly income was about 350 LS. Assuming steady work, this income would place the Suq Sha'abi producers at about the same economic level as mid-level government bureaucrats.

The Suq Sha'abi carpenters arrive at this level of production by circulating through the economy, not necessarily with Suq Sha'abi as an ultimate goal. They tend to be first generation urbanites- as 80% of those surveyed indicated - and to have roots in Sudan's Northern and Central regions. Virtually all of the Suq Sha'abi carpenters trained as apprentices in one of the large Industrial Area workshops. At the completion of their training they were not able to establish independent workshops themselves in these lucrative Industrial Areas, but their having worked in one of these well-known areas did provide contacts for finding equipment and other carpentry supplies. At the time most of these producers were ready to go into businesses for themselves, Suq Sha'abi was being established to cope with the growing population of South Khartoum and the building boom of the early 1970's. At that time it was

the only site open for small scale (or "light") industrial development.

In spite of the permanent threat of eviction hanging over their production, the carpenters of Suq Sha'abi have been financially successful due to the demand generated by the growing population surrounding the market. This growth makes Suq Sha'abi appear more permanent as time goes on, but the government's order against permanent settlement in the area has not been rescinded. The problems of instability and of cramped quarters - the shops are permitted nine square meters of space - tend to override both the traditional feelings of independence held by Sudanese producers and the highly competitive circumstances of the market, to promote some level of cooperation among them. Cooperation consists primarily of the sharing of tools, referral of customers, and joint informal delegations to negotiate with local government authorities that supervise Suq Sha'abi. During the time of this research, a group of carpenters urged the government to construct toilet facilities for the market's workers, a bold move considering the official temporary designation of the market.

The capital accumulation process is a slow one for the carpenters of Suq Sha'abi, despite the low overhead and low labor costs. The carpenters depend on apprentice labor and/or one trained assistant to help them complete their orders, most having two workers per firm in addition to the owner. But three persons working in nine square meters of

space does not leave adequate room for equipment or storage of back orders, which limits production. The severe competition of having 70 workshops all producing similar furniture also weakens productivity.

Because the carpenters face spiraling costs of materials, it is difficult to fix the costs of finished goods for the consumer. Carpenters often complain of having set a price for a dohlab with a customer and then proceeding to the hardware suppliers to learn that the prices of wood or nails, for example, have risen. Sometimes a customer places an order and does not return to pick it up, usually due to his own financial problems. In order to ensure payment, many of the Suq Sha'abi entrepreneurs now demand a one-third deposit on orders. This strategy is not available to the wood market producers described above: their clientele is too scarce and too poor to have such demands placed on them.

When the Suq Sha'abi carpenters do have spare cash - profits of steady customer demand - only a small minority of the sample surveyed said that they spend the cash on home improvements or family necessities. More than 60% said that they invest surplus income in the development of ready-made furniture production, such as purchasing supplies in advance. Many said that they needed to diversify their businesses into ready-made production in order to "make ends meet," signalling that the costs of supporting a family in the city were rising as well.

Such ready-made furniture production is generally limited to small tables and stools because of the lack of space and access to major woodworking equipment. Space shortages in the workshops also force carpenters to sell their ready-made furniture to dealers rather than marketing it themselves, a necessity that many carpenters find frustrating. The small amount of ready-made furniture that is produced in Suq Sha'abi (as opposed to the made-to-order product) is the catalyst that helps to establish vertical linkages between different-sized carpentry firms.

The small scale carpentry firms of Suq Sha'abi are linked to larger firms, principally in Suq as-Saggana or the the Khartoum Industrial Area, through their dependence on sophisticated woodworking equipment. The electric sanders, lathes, and table saws that are essential to a ready-made furniture production line are not owned by Suq Sha'abi producers. These machines are expensive and take more space than is available to the Suq Sha'abi entrepreneurs. The wood is purchased for the production of a particular order and delivered to one of the firms that rent machine time. Young workers at this firm process the wood into planed boards or lathe-turned table legs by the dozen. While most of the firms taking in contract wood-processing have furniture building businesses themselves, there has been a trend towards the establishment of firms that do nothing but process wood for small manufacturers. Bromley and Gerry (1979, p. 8) have labeled these small firms

as "dependent work," with the small scale workshops playing the same role as individuals who are not involved in wage work, but who are nevertheless dependent on larger enterprises with oligopolistic control over factors of production.

The carpenters of Suq as-Saggana, an old construction industry-oriented market, and of the neighborhood workshops scattered throughout the Three Towns, organize their production in ways very similar to the carpenters of Suq Sha'abi. The following case study details the situation of one neighborhood carpenter.

Case Study A: Ghaffar, carpenter in Thawra, Omdurman.

"The carpenter's door is broken," is a familiar Sudanese expression that comes to mind when visiting the workshop of Ghaffar in the Thawra neighborhood of Omdurman. The meaning of this saying is evident when one contrasts the gaping cracks in the cement floor of the shop and the sunlight pouring in through the holes in the ceiling, with the good craftsmanship that marks Ghaffar's product. His reputation as a carpenter has spread through customers, friends, and relatives beyond Thawra to Omdurman proper, providing a stream of buyers for his made-to-order furniture.

Now grey-haired and 52 years old, Ghaffar began his career in carpentry at the age of 10 as an apprentice in his home town of Shendi, north of Khartoum on the Nile. Following his apprenticeship the flow of work led him to Khartoum, then experiencing the economic boom of World War II and the British Army's materiel needs. In Khartoum he was able to find work as an apprentice lathe operator in a large wood processing factory, his first exposure to power equipment. He drifted through many jobs after the war, sometimes working on his own with the tools he acquired along the way. Ghaffar's life was a pattern of employment and self-employment experiences that eventually led him to his goal of establishing his own workshop. But having had much contract work, he does not feel uncomfortable with

taking such work today, when it is available.

When he thought back on how he financed his independent production in its early stages, he mentioned al-takafil al-ijtima'i or "social support" and how it supplemented his earnings from contract work. This common Sudanese social phenomenon is a system of forced family savings, where family members gather periodically to pool capital for welfare or mutually beneficial investment purposes. Many times Ghaffar was the beneficiary of these gatherings, his family having taken careful consideration of his economic potential.

We asked Ghaffar about his current work and if he had any particular problems. "Imported furniture in my view," he said, "is definitely not a problem." Ghaffar stated that all the bourgeois Sudanese importing Italian furniture for their Khartoum homes would regret their purchases because European furniture was not built to withstand Sudan's torrid climate. On the other hand, he did complain of the distance of his neighborhood workshop from suppliers, posing a constant transportation problem to and from Omdurman's Industrial Area, a distance of about one mile. He also complained that while he has a good clientele, too many of his customers wanted him to repair their old furniture rather than to build new pieces for them. Interestingly, we heard similar complaints from tailors in the neighborhood.

The carpenters find steady work through the growth in demand for residential housing in the Three Towns and the constant development of new commercial space.

The carpenters of Suq Sha'abi, unable to expand their workshops or their lines of ready-made furniture, view opportunities to do building contract work as essential to their capital accumulation. For all carpenters and for Suq Sha'abi carpenters respectively, 63% and 61% of those surveyed indicated that they accepted construction contract work in addition to their made-to-order furniture businesses. Carpenters' involvement in contract work varies

by the scale of the assignment. Suq Sha'abi producers generally do home repairs and shop remodelling; larger scale carpenters are contracted to do actual housing construction.

There is a hierarchy of contract work arrangements, based on the remuneration received by the worker. Such work also blurs the distinctions between employment and self-employment in that carpenters take on contract work while maintaining their independent, made-to-order businesses. The first level of contract work, involving younger, less-skilled carpenters (or journeymen) is short-term/part-time work building furniture during a larger workshop's rush period. The carpenter is paid by piece completed to help a firm fill a large order. No commitment of long term employment is made to the hired carpenter, and he returns to his own workshop when the work is finished.

The second level of contract work is an important part of the Suq Sha'abi carpenter's income. These carpenters are often asked to do house repairs and substantial remodelling or room additions. The carpenters supply their own tools and sometimes take their apprentices or journeymen along with them on the project.

The most profitable level of contracting is in the area of building construction² in which highly skilled carpenters are recruited by a building contractor to complete some aspect of a housing project. The carpenters who own the largest firms make their own contracting arrangements,

supplying both tools and additional labor. Such arrangements can become complex, with portions of a project subcontracted out to other workers. In such cases we find Industrial Area carpenters subcontracting the labor of a Suq Sha'abi-type tradesman.

The "dependent work" performed by the Suq Sha'abi carpenters for larger firms is paid through a daily wage. However, the carpenters maintain their made-to-order businesses during the contracting periods, which serves to reinforce the petty producer's feelings of independence and self-esteem even if business is very slow. The facility with which such workers flow between these different levels of employment and self-employment demonstrates the lack of exclusivity among employment categories. The following brief case study illustrates a contract bargaining discussion and shows the confidence with which Suq Sha'abi carpenters approach such work.

Case Study B: Arranging for Carpentry Contract Work.

Jamal wanted to have a veranda added on to his house so he accepted his friend Awad's suggestion that they go talk to Awad's carpenter friend, Mohammed, in Suq Sha'abi. Jamal and Mohammed discussed the dimensions of the veranda and everything was negotiated down to the price of nails for the project. Mohammed also asked Jamal about the quality of materials he wanted him to use.

Mohammed told Jamal that he needed his journeyman, Tarik, to help him with the project and he asked Tarik how much he wanted for his services. Tarik asked for 90 LS, and mentioned how he had built many verandas of this type.

Finally, a price was reached for the project at 455 LS, not including Mohammed's fee. Mohammed told Jamal that because he was a friend of Awad's, he could pay him whatever

he thought was right for the job, "as little as half a pound," he added in a grand gesture. The middleman, Awad, played a significant role in the negotiations, keeping the atmosphere light-hearted and making suggestions of costs and prices between the two other men.

The veranda construction project was actually built by Tarik, increasing his experience in the trade. His boss, Mohammed, did not even visit the work site. Mohammed's tools, his worker, and his "good offices" were his contribution to the project.

The most economically powerful carpenters in Sudan today are those with workshops in the Industrial Areas of Khartoum and Omdurman. This level of the small scale manufacture of furniture shows evidence of the trend toward a capitalistic integration of production. More and more of the tasks which previously were under the control of separate petty producers are being brought together in one unit by the larger carpenters. At the same time, the Omdurman Industrial Area preserves the best in Sudanese hand craftsmanship, as urban Sudan's oldest carpentry workshops are located in this area. The ornate, carved manaber and pulpits of Sudan's mosques and churches are products of these workshops.

There were approximately 200 carpentry firms in the Industrial Areas of Khartoum and Omdurman at the time of this research and 18 of them were part of the survey. Both the number of workers employed or apprenticed in the workshops and average monthly income are useful indicators of the size of the Industrial Area firms. The 20 shops surveyed averaged 4.5 workers and had monthly incomes of

about 800 LS, indicating that Industrial Area carpentry firms were more than twice as large as those in Suq Sha'abi.

While most of the Suq Sha'abi producers were first generation urbanites, the carpenters of the Industrial Areas are almost all from families with long histories in the Three Towns, Omdurman in particular: 15 of the 18 carpenters surveyed said that their families were from Omdurman, the historical center of Sudanese commerce. These men tend to be older than Suq Sha'abi carpenters as well. At an average age of 46, they averaged 10 years older than the Suq Sha'abi carpenters. A handful of the Industrial Area producers were very old, still working at age 70 or 80. These elder craftsmen were credited by many informants as having trained the bulk of urban Sudan's carpenters.

The good craftsmanship and good reputations that prevail among the Industrial Area carpenters are self-perpetuating. The carpenters at this level of production or their immediate predecessors, entered entrepreneurship in one of the Industrial Areas as the land was readied for this purpose from the late 1940's onwards. Despite the very large size of most of these workshops, rents are generally low and set by rent control. It is not unusual to find a carpenter with a shop half a city block in size, paying only 20 LS per month in rent. In concert with their important location, the machinery and equipment that these carpenters have been able to acquire serve them well as collateral, guaranteeing investment loans from commercial

banks and further increasing their relative wealth.

Access to appropriate tools, equipment, and to nearby hardware and lumber suppliers has promoted strong building construction contracting as an important part of the Industrial Area carpenters' capital accumulation process. We described such contracting above as being the most profitable outside work available to urban carpenters. The Industrial Area firms are large enough to coordinate their own work crews and take on complete projects, often subcontracting parts of a project to smaller producers.

The profits earned from such contracting work, which are untaxed due to the informality and undocumented nature of the contracting arrangements, are increasingly invested by the Industrial Area entrepreneurs in ready-made furniture production. Unlike the ready-made production of Suq Sha'abi carpenters, which occurs only when they have spare cash, the Industrial Area producers are able to plan their ready-made production of furniture so that it has become an important, almost dominant, part of their businesses.

The growth and regularity of the Industrial Area carpenters' ready-made furniture production have required that the producers pay more attention to the marketing of their products. The carpenter who builds made-to-order furniture waits for clients to visit his workshop in order to discuss the carpenter's capabilities and the client's needs. An order is then placed and the client returns at a pre-arranged date to pick it up. With the development of

ready-made production, carpenters who have enough capital to invest in advanced purchase of supplies seek to meet the demand for European-style furniture that has accompanied the urban housing construction boom. The introduction of Western tastes in both furniture and life-styles has made furniture stores or "showrooms" (ma'ared) an increasingly important attraction for the urban consumer. There is no haggling over costs of materials and the customer generally finds a choice of styles in these showrooms. An important motivating factor behind the carpenters' rush to establish showrooms has been the demand for imported furniture. This demand has been generally met by merchant capital, unrelated to the skilled trades³.

The establishment of showrooms by carpenters has been a striking phenomenon, evidence of the rapid integration of production and marketing in the trade. When ready-made furniture production was on a smaller scale, 15-20 years ago, carpenters sold their ready-made furniture to dealers. Now, they find it more profitable to control, and are more able to control, both production and marketing themselves as their resources expand. Even though the imported furniture - covered with plastic or synthetic fabrics, or displaying expanses of glass - is poorly suited to Sudan's climate and the largely outdoor lifestyles of even urban Sudanese, it does pose a threat to the domestic production of furniture. Some carpenters have also tried to organize themselves to ask the government to impose higher duties on imported

furniture.

Carpenters have tried to cope with foreign competition by duplicating the styles of imported furniture as closely as possible. An important effect of this luxury import substitution-type production is to further subordinate these petty producers to capital through the mechanism of unequal exchange. The costs of the wood from Austria, the formica from Italy, glue from Yugoslavia, and nails from China that go into domestic furniture production, are all set by the foreign producers of these necessary supplies.

A small survey was made of nine Khartoum and Omdurman showrooms, representing about 25% of the population, in order to better understand the direction of this trend. The trend is a recent one, with six of the nine showrooms having opened since 1977, and three of those selling locally-made furniture. Shops that sell locally-made goods were owned by the furniture producers themselves, indicative of commercial integration. None of the imported furniture shops were owned by skilled tradesmen. Of all the showrooms surveyed only three sold imported furniture and their owners indicated that high prices had slowed customer sales as the regional economy declined. The penetration of imported furniture into the Sudanese market may have reached its limit, but the vertical integration of domestic production - inspired in part by foreign competition - continues to be an important trend among small scale producers.

B. Employment

The consideration of employment emerges primarily from our concern for the carpentry firm's labor needs in its drive to accumulate capital. The availability of cheap labor has been one of the most important factors in developing and sustaining this particular small scale industry. However, in investigating the firm's labor needs it became clear that the worker - as potential entrepreneur - deserved attention. In this section we will describe the new roles and definitions of labor in carpentry production and consider the strivings of wage laborers to succeed to independent entrepreneurship.

Common wisdom is that workers enter the urban labor market through the "informal" door of petty commodity production and then try to move on to large-scale industry. The experience of skilled workers in the small scale carpentry trade contradicts this perception to some extent, with workers not only shifting between employment and self-employment but between levels of production as well. Sudan's incorporation into the world system and the economic distortions of the oil boom era have made a dual labor market analysis less useful in understanding urban society in Sudan. Many of the workers interviewed for this study indicated that they had worked on government building projects and/or in furniture factories before finding well

paid positions as skilled laborers in Industrial Area carpentry workshops. With skilled labor in short supply, particularly in the manufacturing trades like carpentry and metalwork, the young worker with appropriate skills does have some choice of strategies to follow in his pursuit of capital.

The utilization of cheap labor on the part of small scale carpentry entrepreneurs is part of their strategy to raise profits, in spite of the obstacles they face in doing so. The carpenter has more control over the input of labor than he does over the availability of capital, access to power equipment, or access to good commercial space. At the same time, the struggling carpenters of Suq Sha'abi or the wood market seek work with the larger firms in order to stabilize their incomes, Suq Sha'abi-type production being more erratic. But because even wage work with the larger carpentry firms cannot be guaranteed, the Suq Sha'abi-type producers shift back and forth between work for wages and self-employment. In this way many apparently "independent" carpenters earn much of their incomes in the employ of other carpenters, as was discussed in section A above. In this section we turn our concern to workers with even less access to the means of production and who rely entirely on the sale of their own labor.

In terms of recruitment of skilled labor to small scale carpentry, urban producers depend much less than in the past on their family connections. While 50% of all carpenters

surveyed had fathers who were skilled tradesmen, today's producers find that their own children have a wider range of employment possibilities in the urban economy. Some carpenters had relatives working as apprentices in their shops, and this will be discussed in the next section. But the few carpenters who had had family members working for them at some point were successful enough to propel those relatives into their own businesses.

Since 1907, a government-run Labour Office in Khartoum has channeled job seekers to various industrial employers, but this office is ineffective for the informal sector. The Manpower Act of 1974 requires that employers recruit through the Labour Office (ILO, 1976, p. 371), but the Ministry of Labour does not regulate firms with less than 25 employees, the vast majority of which are unenumerated by the state.

The skilled labor recruitment system is a fairly closed circuit, not directly absorbing many rural migrants or unskilled job seekers. The requisite skill is the major constraint to entry, and this is generally acquired through apprenticeship. Apprenticeship training also serves as an important barrier to entry in the carpentry trade. When seeking skilled labor of a more experienced level than the recent apprenticeship graduate, entrepreneurs rely on "informal channels through knowledgeable intermediaries" (Kannappan, 1985). The magawil, or building contractor, is often a good source of information on available skilled workers. Many carpenters have contracting businesses on the

side, so their neighboring Industrial Area colleagues have easy access to this information. Other carpenters, working in more peripheral areas such as Suq Sha'abi or in residential neighborhoods stated that they could not find skilled laborers even if they needed them and that they did not know where to inquire about hiring workers.

The carpentry entrepreneurs need to rely on informal networks to obtain appropriate skilled labor because these workers are highly mobile. They own few of the means of production besides their skills, which they use as strategically as possible to further their own attempts at capital accumulation. As lucrative employment possibilities appear, the skilled workers circulate through the economy from one workshop or project to another. Some of these workers, known as sanay, spend 20 years or longer without their own workshops, working for relatively high wages in the larger Industrial Area firms.

A parallel development, the diversification and intensification of carpentry production in conjunction with the rise of the ready-made furniture trade, is creating new levels of employment and a new division of labor in carpentry. The introduction to the trade of major power equipment such as lathes, sanders, and drill presses has created some job specialization, particularly for lathe operators. The artistically-turned leg is an essential component of two of the most basic products of carpentry workshops: beds and stools. As none of the smaller producers

own electric lathes, they depend on the larger producers to rent time on the machines to them. The Suq Sha'abi producer will take the wood he needs to be lathed to one of the Industrial Area workshops. A few of the large workshops have lathes that service all of the smaller producers in the Three Towns. They are operated by wage workers whose sole task is to produce furniture legs. This division of labor is, to some extent, turning the Suq Sha'abi producers into furniture finishers because they rely on wood parts processed elsewhere⁴.

Within the larger carpentry workshops themselves there is also a hierarchy of wage workers. At the top there is the usta, a Turkish term that is a relic of Sudan's Ottoman past. The usta supervises production in the absence of the workshop owner. Next is the mwalim ("teacher"), who is also highly skilled. The other categories of worker are sanay ("skilled worker"), "assistant", and apprentice. Of course, not every shop has or recognizes every level of worker, but the workers generally estimate that it takes two years to progress from apprentice to sanay in carpentry, and three years to move from sanay to mwalim.

The skilled workers use their workshop experiences to develop their craft and enhance their reputations among customers and senior producers, while also continually seeking ways to increase their earnings. Their goals primarily focus on independent entrepreneurship, but they are blocked by the severe competition in markets like Suq

Sha'abi. There is no room for expansion in this important petty production area, nor are other low-income market areas being made available to new producers. Space only becomes available when other carpenters leave the trade. Also, carpenters usually acquire the necessary tools slowly; start-up costs for a small scale carpentry business were estimated by those surveyed to be about 500 LS. The only area of carpentry production that is expanding is in Omdurman's Industrial Area, but only wage work positions there are open to young carpenters. The requirements for capital and "influence" far exceed the resources of a carpenter with only five or six years of experience.

An important alternative to petty entrepreneurship for carpenters who lack the means of production has been migration to work in Libya, Saudi Arabia, or the Gulf. Entrepreneurs said that they noted a surge in migration beginning in 1975, two years following the major rise in oil prices there. Opportunities for work in the oil-producing countries are declining today, however, due to the slump in oil prices and increasing suspicion of Arabic-speaking foreigners on the part of the receiving governments.

The conditions that prevent a large number of skilled carpenters from entering the trade as independent entrepreneurs also promote the availability of fairly stable wage work. Capital is becoming more concentrated in fewer large firms (having eight or more

workers), providing wage work for skilled carpenters. The evidence of this phenomenon is the relatively large number of older men, aged 35 and over, who continue to work for wages rather than to own their own businesses. In the tailoring trade and most other forms of petty commodity production it is extremely rare to find someone over the age of 30 working for wages (other than tailoring's "half-work), however, in Industrial Area carpentry firms we found that 45% of employed workers were over the age of 35.

This phenomenon is limited to the prosperous firms, with the skilled workers contributing considerable educational and training backgrounds to their employers' production of furniture. Their knowledge of fine woodworking techniques improves the quality of their employers' products and the workers have often established reputations that attract customers to their employers' workshops.

When asked about their working conditions, these employed carpenters tend to de-emphasize their lack of access to the means of production and focus instead on the flexibility of their positions. Many of the carpenters are able to earn high piece-work wages for projects that they complete in workshops other than those of their principal employers. An entrepreneur who lacks the skills for a particular project may "rent" the labor of a neighboring firm for the completion of that project. This type of arrangement only occurs in the larger Industrial Area firms where orders may be especially complex. While the project

wages may be good, the precarious nature of the workers' positions is clear in these cases: the entrepreneur is unwilling or unable to make more than a temporary commitment to even the best of the skilled workers.

The following case study illustrates the wage worker's situation in a small scale carpentry firm. The carpenter is in the frustrating position of being responsible for the firm's production without attaining the control of ownership.

Case Study C: AbdelRahman, journeyman carpenter in Omdurman's Industrial Area.

AbdelRahman has worked as a skilled carpenter for three years, following an apprenticeship of three and one half years. Working with him in the shop, producing wardrobes generally, are two apprentices and one other journeyman. The workshop owner checks in on them daily, leaving AbdelRahman in charge in his absence.

AbdelRahman, who is 25 years old, does not express confidence that he will ever own a business. "I'm still a sanay in a rented shop, and I've been working in this trade for more than six years." He believes that the path to private ownership of a workshop lies in establishing a good business in a rented premises and then being in a position to bargain with the government for land on which to build one's workshop. AbdelRahman indicated that there was considerable need for wasta, or "influence", to follow this path successfully, but he also conceded that his own reason for not being able to implement this strategy was simply a lack of money.

The two journeymen are paid 40 LS for each wardrobe completed. As the owner of the business seems to strike a different bargain with each customer, the two young men could not tell us the standard price of a wardrobe. They said that there were weeks when they made 100 LS each, but usually they are lucky to collect the 40 LS for one completed wardrobe in a bi-weekly period.

AbdelRahman is slowly accumulating a set of tools which he keeps at home and does not use on the job. He had a chance to take some formal training in this trade at an

institute, but he passed it up in order to start earning money immediately. The decision was a serious one for his family, with some relatives telling him that he would prosper if he took the course and that it would help him to go abroad, while his father admitted that the family urgently needed the money.

The reason for the workshop owner's daily absences is that he has many requests for small building construction projects. The owner has promised to take AbdelRahman along on a future contract but he also says, "I need you to look after things here in the workshop."

This section has revealed the changing role of wage labor in petty carpentry production. This change is a part of the concern for the growth and development of this type of production and its maintenance as an important part of the urban economy. The difficulties encountered by young workers with skills trying to reproduce independent entrepreneurship in the urban economy, and at the same time, the relative ease with which they find wage work, signal a concentration of resources in the carpentry trade. A trade that was once marked by its individuality in entrepreneurship, characterized by hundreds of one-man firms, is institutionalizing wage labor as an essential part of its capital accumulation process.

C. Apprenticeship

Apprenticeship is the dominant method of training carpenters in urban Sudan. As we found in tailoring, virtually all of the informants and respondents in the study of carpenters indicated that apprenticeship had been part of their adolescent experiences. Interviews with entrepreneurs about their impressions of training and with their apprentices indicated the direction of change occurring within this important social institution.

In the previous section we described how the demand for carpentry skills exceeded the supply, effecting the conditions for employed workers. The apprenticeship system, as it functions in carpentry, trains this needed skilled labor cheaply while at the same time, supplies carpentry firms with cheap labor in the form of young apprentices, albeit with low levels of skill. Like the carpentry wage workers who generally spend only a few years in any one workshop, the apprentices, too, are short-term labor. The entrepreneurs surveyed said that they generally keep an apprentice for two to four years, the time it takes to complete workshop training. Today's requirement is shorter than the training experiences of the present entrepreneurs: their apprenticeships averaged 5.6 years.

Tradition and education in its broadest sense continue to be associated with apprenticeship in contemporary Sudan, despite the alienating forces of dependent

industrialization. The preservation of craftsmanship that marks urban carpentry is first introduced to a boy during his apprenticeship. But fine hand-work competes today with the demands of the ready-made furniture trade and the introduction of more power tools and equipment. The training that results is a unique urban blend of competing economic forces, and is characteristic of the dynamism found in the small scale industries of Khartoum and Omdurman.

Because the deterioration of tailoring apprenticeship was described in the previous chapter, it is important that we examine the master-apprentice relationship in carpentry and how it continues to survive in urban Sudan. It should be noted that carpentry, unlike tailoring, is a trade that requires assistance. So many separate tasks are required to complete a particular project that the job is most effectively shared with a subordinate, the apprentice.

The manual trades were historically repugnant to the Nile Valley Sudanese, a rural people. Work on the land was the respectable means of earning a living. Manual trades had an ancient association with slavery and subservience that was difficult to remove⁵. Less than a generation ago people would try to prevent their sons from taking carpentry or metalwork apprenticeships because these tradesmen had reputations for drinking and swearing.

Urban society creates a strong demand for manufactured goods and services. The important function served by small scale industries to the low-income community in need of its

products, has promoted the respectability of these trades. But in this highly moral society the tradesmen themselves are conscious of their reputations and see the route to community respect through their relationships with youth. Toward that end, the carpenters are very firm when asked what qualifications they need to see in their apprentices. Skills are rarely mentioned, but honesty, good manners, morals, respect, and enthusiasm are all considered essential attributes of the prospective apprentice.

Such requirements cut across the income levels that we have described within the carpentry trade. But because carpentry provides a good living to the tradesmen relative to other forms of petty commodity production, these characteristics can also be seen as serving a "gatekeeping" function, enforcing the exclusivity of the trade. If a boy does not appear to the master to have these qualifications, there are simple grounds with which to dismiss him. Also, the carpentry masters generally demand that they meet with the prospective apprentice's parents, not an easy meeting to arrange if the boy is a migrant from the distant southern or western regions of the country.

Another clue that the carpenters provide in helping us to understand the dynamics and direction of the trade is their frequent mentioning of the "brain power" that apprentices must have in order for them to succeed. When asked what the carpenter-in-training will need to prosper in the trade, many carpenters speak of the need for

intelligence. This can be seen as emphasizing the individualistic nature of the craft and confirming the "a-man-can-make-it-on-his-own" attitude prevalent among carpenters. The apprentices, working in close quarters with their masters, are aware of the masters' thinking on this subject, and are infused at an early age with a powerful ideology. Tales of individual success abound in the urban market areas ("Mohammed returned from work in Saudi Arabia with a set of new tools and enough money for a dowry!") and serve to pass the often monotonous workday.

The following quote from one of Omdurman's more prosperous carpenters exemplifies the attitude of the tradesmen toward their prospective trainees and the limits of the system.

"There are too many students looking for work here in the Industrial Area. We don't have enough apprentice positions for all of them; we haven't enough work to keep them busy. They are generally failed (post-primary) students who have no other choice but to look for work in the skilled trades. They can't work for the government: they don't have school-leaving certificates. They can't work in agriculture: that's declining, too. And once they've seen Khartoum, these boys are not about to return to their bilad (home province)."

The impression that youths seeking manual trades are failed students is strong in the Industrial Areas, although the evidence for this phenomenon is only anecdotal. But again, it is clear that the entrepreneurs are trying to enforce rigid standards on those youths who wish to join the trades.

The pressures on Khartoum's tradesmen to deal with the surge in rural to urban migration makes having well-known requirements for entry to the trade essential to maintaining its status as a middle class occupation. The decline of intergenerational/intrafamilial skills transfer in carpentry forces the entrepreneurs to look outside of their families for workers. Even among the master carpenters working today, only 26% of those surveyed served apprenticeships with relatives and only seven per cent with their fathers. Of the present apprentices, only 23% were related to their masters. At the same time, the proportion of related individuals working in carpentry firms is far higher than the proportion found in tailoring. Again, carpentry requires more hands to complete its tasks than does tailoring. At the same time, the carpentry trade has not yet experienced the degree of alienation that was described as a factor in tailoring's disappearing apprenticeships.

As part of the concern for a prospective apprentice's background, the masters are interested in education. It is important, they say, that their apprentices be literate. There is an increasing value to literacy as power machines are accompanied by user manuals and growing businesses require accurate bookkeeping. Eighty per cent of the carpentry apprentices surveyed had attained a primary school level of education, but only 20% of all apprentices had studied beyond that to complete general secondary school. One of the themes in the development literature has been

that formal education is a waste of scarce resources on youths who drop out of the system at an early stage to pursue manual occupations. It is possible to view benefitting from a few years of schooling as a clever strategy on the part of apprentices who recognize the value of literacy in their carpentry work.

The lack of contact petty producers such as carpenters have with the state-run vocational education programs would seem to indicate the self-sufficiency of the trades in their training capacity. Only six per cent of the carpenters surveyed had any experience in a technical school and none of their apprentices had participated in such a program, although the young age of most of the apprentices does not preclude their eventual enrollment in a technical training program. Most of the carpenters indicated that they thought the vocational schools did not provide "practical" training and was too "scientific."

Once the boy begins his apprenticeship, generally between the ages of 12 and 14, he quickly finds that it is to be an educational experience. In the carpentry trade the term of respect used by apprentices for the master is mwalin, "teacher". We cannot ignore the fact that the primary objective of the carpenter is to produce goods that make money, but there is a tone set in the workshop which works to preserve the quality of the product, attracting customers. The paternalistic attitudes that prevail in Sudanese society find their expression in the workshop in

the close relationship between master and apprentice. This emphasis on learning a trade in carpentry contrasts with tailoring, where apprenticeship barely exists, and with metalworking, where the larger size of the firm works against a close atmosphere between workers. The degree of interest in learning the trade was best summarized by one carpenter with considerable experience in the trade who exclaimed, "After 16 years, I'm still an apprentice!" The new equipment and new furniture styles entering the market provide continuing challenges for the carpenters.

Carpenters surveyed had an average of 1.5 apprentices working in their shops. The boys were paid a "subsistence" allowance of between two and three LS per week plus meals. Upon completion of the apprenticeship, 32% of the carpenters gave their apprentices parting gifts of tools or cash with which to begin their businesses. The apprentices were optimistic about their chances in this regard, with 73% of them saying that they thought they would go into business alone when they finished their training. The youth of those surveyed, average age 16, may have influenced this optimism.

A more likely prospect for the young carpenters, one that was observed among their older brothers, is that they will work as sanay (journeymen) for someone else after apprenticeship, or possibly continue to work in the same workshop at a higher wage. Migration to work in one of the oil-producing countries is also on the minds of all

apprentices, given the tales of riches from work abroad that flood Suq Sha'abi and the Industrial Areas. Many masters will give their apprentices a "certificate of recommendation" at the end of the training period, essential for anyone contemplating work abroad. One elderly carpenter stated, "I've trained so many of Saudi Arabia's carpenters!" But as described in the employment section above, the opportunities for Sudanese to find work abroad are declining.

The following case study, a master's impressions of his experience as a trainer of young carpenters, describes the paternalistic attitudes that prevail among carpenters. It is, perhaps, under such conditions that an appreciation for craftsmanship is instilled in the next generation of skilled tradesmen.

Case Study D: Issam, master carpenter, Suq as-Saggana, Khartoum.

Since 1965 Issam has rented his workshop in an old market, near the hardware dealers and the construction tradesmen. From the very beginning of his entrepreneurship he has had apprentices learning the carpentry trade and helping him with his work. The workshop produces solid furniture and has only recently begun to manufacture ready-made tables. Issam does not have a showroom so he exhibits the pieces in a line outside of his shop. The cramped nature of Suq as-Saggana tends to promote friendships between the suq's apprentices and tool-sharing between entrepreneurs.

His three sons worked for him after school and during their holidays, but he never referred to them as "apprentices," they were just helping out in the family business. "I didn't want my sons to follow me in this trade," Issam said. "The hours are too long, the work is too hard, and there is no pension plan for the self-employed businessman, no assistance from the government."

As for the boys he enrolls as apprentices he

said, "The boy must come see me with his father, and the father must be aware that the boy comes to me to learn and not to make money." Issam's apprentices are given subsistence allowances however, and he has been known to lodge boys who have come from homes in the Gezira.

Issam said that it takes about two years for a boy to learn hand carpentry properly, another six months to learn the various power tools. Issam reserves most of the use of his few power tools for himself. "I like to keep my eye on the boys, and I'm always in the workshop should they need me." He does not tolerate misbehavior among his apprentices and is quick to cane those who do not obey his rules.

A Syrian carpenter trained Issam in the 1950's, in the old Suq al-Arabi. His master gave him a money gift when he completed his training, and Issam has continued to do so with his own boys in his business. "If you treat them right then maybe they will remember you and come to visit on the eid (annual religious holiday)"

Apprenticeship is the major form of socialization among skilled workers. Observing and participating in work in the close quarters of an urban workshop introduces the boy at an early age not only to the skills of the trade, but also to its customs and lore, as well as to the rigors of urban life. Witnessing bargains and deals struck with clients and suppliers, and listening to the arrangements made with contractors, give the apprentice reason to believe that he may follow the same path. It is possible that the boy could use these contacts if given the opportunity to work for himself. The strong feelings of paternalism that are still part of the master-apprentice relationship, reinforced by the close working conditions, protect the apprentice from early disappointment in his quest to succeed to entrepreneurship. These feelings may also impede the

establishment of independent businesses by the youths as they are kept in positions of service.

D. Spatial Concerns and Relations with the State

Urban land is a very important factor of production to the growing small scale carpentry industry. The state, primarily through the agencies of local government, controls zoning and access to scarce urban space. The state also controls production (use of equipment, size of parcel) in existing firms as well, ostensibly for health and safety reasons. The issue of land, its distribution and administration, is the primary area of conflict between petty commodity producing carpenters and the state in urban Sudan.

A consideration of the spatial issue projects a different perspective on the capital accumulation process for carpenters. We have described, in this chapter, some of the barriers that carpenters face in their quest to establish stable entrepreneurship, only briefly touching land constraints. In this section we will explain in more detail how both space and the state contribute to the differentiation process among carpentry firms.

In many respects the government of the Republic of the Sudan continues the role of the colonial state in regulating petty commerce. With a primary interest in supporting

capital intensive industry as essential to its long-term development strategy, the state has viewed petty commodity production as more of an irritant than as essential to Sudanese development because it encourages rural migrants to come to Khartoum and harbors possible political agitators among the poor. To this end, most of the urban market areas have been assigned their functions by the government. Suq as-Saggana, for example, was originally designated as a center for the building trades, and Suq Sha'abi was designed as a bus station with temporary facilities for petty trade. These purposes have been, of course, drastically modified by the natural patterns of growth and crowding common across urban Africa.

In most cases the regulations and policies of state commercial control are ineffective. Town Councils assigned to supervise the licensing of small scale industries are unaware of the numbers of businesses - legal or illegal - in their jurisdictions; electrical equipment banned from use in residential neighborhoods goes unconfiscated. In some cases, the state is losing revenue by its failure to notice the development of the small scale economy. The subcontracting arrangements so important to carpenters are neither regulated nor taxed by the government. The taxes that are collected on furniture production, which tradesmen note are ironically named "development taxes," are highly resented by producers. The benefits that petty producers derive from the state are not apparent to this group of

taxpayers.

There are more localized efforts by the state to control petty commerce. During the Nimeiry regime (1969-1985) each urban market was assigned an amin or "leader" who was an official of the sole legal political party, the Sudanese Socialist Union (SSU). The amin of Suq as-Saggana, for example, symbolized the close relationship between the party, the state, and the nation's merchant class. Workers, to a minimal extent, depended on the amin to settle disputes in the market and to supervise regulated prices. Because the amin - which also means "honest"- was also a merchant, he served as a representative to the party from the market as well. But both the problems of regulating petty commerce and the very part-time nature of the amin's role are characteristic of the "informal sector" in African cities. The state's attempts to enforce strong policies on petty production are weak and haphazard, thwarted by the sector's dynamism.

The Carpenters' Cooperative Union is a government-sponsored organization that is an important agent of control of petty production. Established in 1971, as another organ of the SSU, it had 1000 members nation-wide in 1983. Carpenters purchased shares in the Union, with the more shares purchased, the greater the buying power of the member through the cooperative. The Union does not set standards for the trade in any way but does serve to facilitate the importation of carpentry and hardware

supplies from abroad. An official of the Ministry of Cooperation serves in the Union's Omdurman headquarters, directing the day-to-day purchasing arrangements.

The members of the Carpenters' Cooperative Union who have workshops in the Omdurman Industrial Area, the most important locus for small scale furniture production, have been very active in persuading the government to provide more land for expanding workshops. To the north of the Industrial Area was a large tract of land occupied by poor squatters from the West who called the area, "Zagalona" (in colloquial Arabic, "we have been discarded"). Neither electricity nor water were supplied to the squatters' homes, discouraging further settlement.

Although Zagalona was zoned for residential development (it is on the western edge of Omdurman's Thawra neighborhood), the Industrial Area entrepreneurs decided that they needed the land for expansion. The combined power of the carpenters' and metalworkers' organizations in the Industrial Area was able to defeat the concerns of this politically weak neighborhood. Large plots were drawn and plans were made for supplying electrical and water services. Entrepreneurs who had shops in the Industrial Area and who were members of one of the recognized Unions were given preference in the distribution of plots. By 1984 the New Extension to the Omdurman Industrial Area was full of modern small scale carpentry and metalworking workshops.

In this example we find an interesting case of the

many-faceted relationship between petty production and the wider society. Ironically, Zagalona was home to a segment of the population for which petty production existed, the urban poor. The financial success of some petty producers, in an economy where large scale industrial development has failed is partly due to their ability to exploit their close relationship to the state. Cooperation between the state and successful petty producers in this case has forced rural migrants to look elsewhere for scarce housing. At the same time, carpenters in less-privileged positions, such as those of Suq Sha'abi or the wood market, continue to produce for lower-income clientele and quietly agitate for the space that would permit them, too, to expand their production.

Metalworkers are a group of petty producers with concerns about land distribution very similar to those of the carpenters. This topic will be further developed in the next chapter's discussion of the metalworking small scale industry.

E. Summary and Conclusions

Sudan's urban carpentry trade, characterized both by an incipient level of capitalism and by significant non-capitalistic social relations, presents an excellent example of petty commodity production. In this chapter we

portrayed this important small scale industry as struggling to benefit from the severe economic changes in Sudan while maintaining traditional notions of craftsmanship and a place for family and/or community participation in production. The changes wrought by Sudan's troubled economy are veiled by this careful attention to production techniques and by providing a supportive atmosphere for training. The co-existence of capitalistic and non-capitalistic social relations and attitudes within one socio-economic unit is a typical feature of petty commodity production.

We have described a considerable amount of the social differentiation that exists and is developing within small scale carpentry. Three major levels of production can be identified, based on income and varying degrees of access to the means of production. Carpenters of the wood market, shifting between the conditions of employment and self-employment, are the lowest income group among the carpenters. Suq Sha'abi, where carpenters are constrained by space and lack of power equipment, represents the middle level of the trade. The Industrial Areas of Khartoum and Omdurman, their carpenters producing modern furniture to compete with imports and satisfy the furniture demands of the wealthy, constitute the highest level of small scale carpentry.

The "petty production" aspects of these three levels affirm that they more resemble each other in social structure than any one level resembles large scale, capital

intensive industry. Wood market carpenters depend on Suq Sha'abi entrepreneurs for part-time employment and materials; Suq Sha'abi carpenters need the equipment that is only available in the Industrial Area workshops; the Industrial Area firms depend on the skilled labor emerging from the lower levels of production in order to fill their orders and complete their construction projects. As a whole system, this petty commodity producing carpentry industry is linked to the regional economy through lucrative overseas employment opportunities for skilled carpenters and through dependence on foreign supplies of basic hardware. All three levels also attempt to reproduce their skills through an apprenticeship system that maintains ascriptive patterns of recruitment, patterns that endure due to the lucrative nature of the trade.

The push to establish a ready-made furniture trade at the highest levels of petty commodity production has had repercussions throughout the economy. The Industrial Area entrepreneurs could not produce such furniture without the skilled labor supplied by Suq Sha'abi entrepreneurs. At the same time, the transformation of the trade into more mass production lines absorbs more and more of the scarce resources of the urban economy. Access to space and to capital, already strained in Khartoum, become more limited for the poorer carpenters as ready-made furniture production grows. While this trend does advance the transformation of petty production, it is a slow process in a poor country.

The contract and part-time work available to the skilled carpenter has reduced the distinctions between employment and self-employment in this particular industry. The carpenter who does not find a great demand for the furniture he produces in his own workshop, can find work pooling his skilled labor with resources contributed by larger businesses to produce more valuable goods. The money that the employed carpenter earns through such contracts will not necessarily lead him to independent entrepreneurship in this unstable economy. A more rapid route to independent entrepreneurship for some has been migration to work in the oil-producing countries. But such opportunities are declining under the poor economic conditions of the entire region. Both part-time work and migration of skilled labor will be important topics in the next chapter on the metalworking industry.

Furniture is a basic commodity, important to all levels of urban society. The producers described in this chapter do provide products for the urban poor at reasonable prices as well as for the new bourgeoisie. Without the wood market or Suq Sha'abi carpenters, most urban dwellers would not be able to afford furniture. The employment provided in workshops, in hardware shops, and in the building industry are also vital to the economy.

Similar concerns are addressed in the discussion of metalworking that follows. These two trades have many common features, but in terms of potential for cooperative growth,

carpentry does seem more suited. The nature of carpentry production gives it a more fluid use of space than in metalworking, which tends to encourage the joint use of facilities. The common but limited use of lathing equipment and other major pieces of machinery that was described in this chapter points to a possibility of the expansion of cooperatives in certain lines of carpentry production. But under present conditions - although the importance of this small scale industry grows with the urban population - the producers' concentration on individual strategies of accumulation cannot be the foundation for an industrialized Sudan. With the carpentry trade's prosperity tied to Sudanese economic conditions, the present small workshop-oriented character of the craft provides hundreds of barometers with which to gauge urban development.

NOTES

1. See Chapter III for information on how numbers were determined.
2. See ILO, 1976, p. 15 and Kameir (forthcoming in Pons, ed., p. 6) for more discussion of Khartoum's building industry.
3. See Babiker, The Sudanese Bourgeoisie, 1984.
4. It should be noted that it is still possible to find hand-carved furniture legs in the Three Towns today.
5. Communication from Haydar Bedawi, 1985, student researcher, Faculty of Economic and Social Studies, Khartoum University.

CHAPTER VI

METALWORK

The development of a small scale metalworking industry in Greater Khartoum presents the most dynamic case of informal sector activity within an otherwise stagnant economy. The source of this dynamism, however, is tied to unstable forces beyond the control of Sudanese society, further impeding the goals of sustained growth and equity. Nevertheless, metalworking itself is experiencing an expansion and diversification both of product and of producers. The social relations needed to advance such production are complex and are evidence of the effects of capitalism on what, in effect, is a subordinate part of the Sudanese economy.

This chapter will draw on the case study data and the survey of 46 metalworking shops in Khartoum and Omdurman to describe this most vigorous small scale industry. The chapter will show that compared with tailoring and carpentry, the small scale metalworking industry has more complex relations of production, uses more expensive and imported materials, and has more links with other aspects of

the economy. The skills required in metalworking also provide an interesting comparison with the other two trades in that these skills are transferrable to a wide variety of industrial occupations.

The fabrication of metal doors, windows, and bed frames is an industry that has permitted a growing number of small scale capitalists to flourish. At the same time the expansion of this trade has contributed to the growth and permanence of an urban working class in Sudan, which is semi-skilled and unable to initiate independent production.

Ironworking is one of the earliest activities of African civilization (Kense, 1983); however, there is a severe disjunction between the ancient and contemporary practice of this trade in Sudan. Metalworking has been associated with both castes and slavery in the North and West of Sudan even in this century. There is also evidence that metal workers had privileged positions in the feudal societies of Sudan's past¹. But the metal workers of today, working with imported sheet metal and processed iron and equipment from Asia and Europe, are a development more of Sudan's contemporary absorption into the world economic system than of traditionally ascribed occupations. Product is an important source of distinction from the past, for today's metal workers primarily serve the modern construction industry and the urban need for domestic furnishings. The rapid decline in apprenticeship training and the lack of generational skill transfer are other areas

of disjunction with former patterns of metalworking production.

Nevertheless, in the modern history of Sudanese metalworking, links with the past may be identified. The Awadia clan of the Northern Sudanese ethnic group, the Ja'aliin, are celebrated for their work with metal. One Omdurman metalworker interviewed in this study, who was born in an Awadia village near Shendi, said of his people, "even our women are metal workers!," making a joke while emphasizing his family's intimate connection with the trade. We can also find manufacturers of saj, simple iron animal feeding troughs, in the Omdurman industrial area. These men, called "gypsies" (halab) by the Sudanese, and who have a relative degree of ethnic distinctiveness, ply their trade without modern equipment by hammering metal over wooden forms². However, most entrepreneurs involved in contemporary metalworking trace the origins of their trade to the simple engineering workshops of the colonial era, which provided some of the earliest wage labor experiences in Sudan. The British administration's development of Sudan Railways, which continues to be the nation's largest employer with 35,000 - 40,000 workers, was also important in introducing the skills and materials that distinguish today's metalworking trade.

Large-scale industrialization has not been a successful aspect of Sudan's post-independence economy. Industry's share of the gross domestic product has increased from only

9 to 15 per cent between 1965 and 1983 (World Bank, 1985). Among the causes of the stagnation and near-failure of Sudanese industry are foreign exchange constraints, shortages of fuel and imported machinery and spare parts, and lack of investment, problems that Sudan shares with Africa's poorest nations. Because large-scale capital-intensive industry has been unable to meet the employment needs or demand for goods that confront a continually growing urban area, the small scale industries exemplified by metalworking have carried a special burden. Such production cannot be seen as compensating for weak industries or as serving as a substitute foundation for industrialization. Under the conditions of a distorted economy however, small scale production has experienced some growth during the post-oil boom era.

The success of small scale metalworking cannot be attributed then to the stimulation that might otherwise be provided by industrialization. The strength of metalworking is derived from the high demand for its product. Sudan's urban bourgeoisie has found the short-term gains of investment in urban housing stock more profitable than investment in industrial production. This has the effect of providing work in the area of the manufacture of metal doors, window frames, and domestic furniture.

The shifts in income distribution that have followed the Middle East oil boom of the early 1970's and the resultant well-paid overseas work for many Sudanese have largely

shaped the structure of petty commodity production in urban Sudan over the short term.

Labor has not been able to find employment in large-scale industry, so workers are drawn to the expanding area of housing construction and related trades. The diversification of metalworking production parallels the development of new roles for labor in this sector: growing workshops divide production tasks and increase the social stratification of the trade. The demand for the metalworker's product has not only generated new labor hierarchies within individual workshops but has created considerable income inequality among metalworking firms as well.

Constraints to metalworking production have also contributed to the differentiation of the trade. Varying skill levels in using the relatively sophisticated equipment needed for metalwork as well as the complete lack of skills in some shops account for inequality. Also, equipment and infrastructural services are not equitably distributed among shops. In some cases low educational levels of producers are barriers to advanced production. The raw materials, supplies, and equipment needed for the metalwork trade are almost all imported into Sudan, which makes this sector an important link to the world economy and reinforces Sudanese dependence. Inequitable access to the world supply market is another important area of differentiation among firms.

As with the two preceding case studies of tailoring

and carpentry, we shall describe and analyze metalworking by addressing four basic issues: 1) management/entrepreneurship- what are the strategies of production in metalworking and how is the metal workshop organized? 2) Employment- what new forms of employment are being created in metalwork? 3) Apprenticeship- how is the apprentice training system changing? 4) How does the state use its authority over urban space to control or influence small scale metal work production? The discussion of these issues will further advance our consideration of the increasing social heterogeneity in small scale production.

A. Management/Entrepreneurship

The simplest form of metalwork production found in urban areas has strong roots in rural and agricultural Sudan. The samkari, the manufacturer of wide, shallow pans called saj, takes metal pieces he has scavenged and pounds them into shape with a mallet over a discarded tire rim, producing a deafening noise. These saj are used to feed grain to goats and sheep or as wok-like pans for kitchen frying. The samkari work in alleys, temporarily abandoned spaces, or in a few cases, shops that were rented at a controlled rate long ago.

Such production is becoming rare, and indeed, the

little that is produced by sankari is sold primarily to dealers outside of the urban area. The more important product of modern metalworking can be easily identified by walking the streets of any Sudanese town. Double-doored metal gates and grates for windows complement most contemporary housing. Even the traditional jalous house in urban Sudan, made with a clay mixture and wooden doors and windows, is rebuilt with metal fixtures after being ravaged by the rains or termites.

Inside the Sudanese home the observer finds still more products of the metalworker's craft. Small, portable tables, chairs of many sizes, and bed frames are necessary components of urban living in Sudan. As one studies these products more closely, it becomes obvious that the work in metal varies considerably in quality.

Access to raw materials, skills, work space, equipment, and labor is not distributed equally among the urban metalworkers. Successful entrepreneurship in the metalworking trade depends both on continuing access to these inputs as well as a careful manipulation of the resources that are available. These factors have contributed to the social differentiation that characterizes urban metalworking. To some extent as well, metalworkers with more advanced skills and sophisticated equipment are manufacturing for higher income consumers. In this section we will contrast the varying strategies of production employed by metalworkers and detail the differentiation

found within this subsector of the urban economy.

Suq Sha'abi ("People's Market") in South Khartoum is the site of the newest entrants to the metalworking trade. The men who fabricate metal chairs and tables in this sprawling enclave of petty commodity production were attracted to metalwork following the new housing construction boom of the mid 1970's. Suq Sha'abi was created at that time and provided the only space available for such production, albeit on an officially temporary basis.

The fundamental characteristic of the metalworking businesses in Suq Sha'abi is their instability. These workers occupy the suq despite government policy prohibiting the use of their machinery in this area. Operating under a yet-to-be-implemented threat of expulsion, their production is also constrained by lack of space. What little space they do have must be used to store equipment, tools, back orders, and in many cases, accumulated salvage metal, in addition to housing the actual manufacturing process.

These conditions demand that metalworkers adopt a variety of strategies to manage their businesses and to accumulate capital. There is little uniformity in the combination of background resources, loans, labor, outside work, and rental schemes assembled by the entrepreneurs. Similarities among the metalworkers of Suq Sha'abi are in their products, their income level, their sales to individual customers exclusively, and their low prospects for moving into more profitable aspects of the trade.

The key to successful production in metalwork is, of course, access to the appropriate equipment. Initially the producer may use borrowed equipment on a part-time basis, but the goal is machine ownership to facilitate greater flexibility in production. An arc welding set and a stationary metal cutter are usually the only major pieces of equipment that the Suq Sha'abi metalworker can both afford and fit into his limited space. Supplemented with a selection of the appropriate mallets, saws, and other tools, the equipment owned by a metalworker largely defines his product. In the Suq Sha'abi case this means metal gates, window grates, and some specialty work such as zir holders, water tanks, and packing trunks.

An arc welding set costs between 1300 and 1500 LS. The machine for cutting metal may be purchased for approximately 300 LS. While the Suq Sha'abi-level metalworkers interviewed for this study stated that their start-up costs averaged 700 LS, most indicated that even acquiring the few machines they did have was a long process. This process can be accelerated by migrating to work in one of the oil-producing states in the region. It is common to meet metalworkers who have acquired machines with the money they have earned overseas.

It is essential for the individual entrepreneur to have the machines in his own shop because, unlike carpentry, metalworking production does not lend itself to the sub-contracting of the steps involved in fabricating a door,

for example. The entire process- from raw materials to finished product -must be completed on the premises. The awkward size of sheet metal and the lack of easy intra-urban transport are the main reasons for this production reality.

After he equips a shop with the necessary machines the small scale metalworker must seek access to supplies of the materials needed to produce doors and windows. Sudan has virtually no supply industry to support such a trade, so the metalworker relies on imported materials. These are obtained from the maghalig, the hardware dealer who also serves small scale carpentry. The relationship between the metalworker and the maghalig is an excellent example of the complex linkages that have evolved within petty commodity production and that tie this form of production to the world economy. Here a small businessman (the metalworker) buys expensive, imported, materials from another small business (the maghalig), which pays high wholesale prices due to the costs of transport to Khartoum from Europe and the Far East. Adding to the cost is the fact that the maghalig has placed its order independently for a relatively small shipment of materials.

While the metalworker does take care to shop for the best price from the hardware dealers, he receives no special consideration from an individual dealer all of whose customers are in the same situation. The dealers themselves are not involved in any cooperative purchasing arrangements

although there was talk of initiating such a venture during the time of this research.

The next problem that the metalworker faces is moving his supplies from the hardware dealer to his shop. The hardware dealers have established themselves to serve the larger carpentry and metal firms in the Three Towns' Industrial Areas. Suq Sha'abi, the site of smaller tradesmen, is one mile from the nearest maghalig. A small scale transport industry has developed to serve the smaller businesses' needs. Toyota pick-up trucks with drivers are available for rent in the industrial areas to take sheet metal, piping, and other materials to metalworking shops in Suq Sha'abi.

An important method of obtaining supplies for metalwork is scavenging or recycling of used materials. Most metalworkers at all economic levels state that they recycle used materials to some extent. The shortage of imported materials is a constant problem in a country that often faces foreign exchange constraints. Sudan is not a "throw-away" society; the people are accustomed to conserving the few resources that they have. Recycling becomes more of a challenge under these circumstances with metalworkers having to search in order to find materials they can re-use. They often must compete for items that have the most potential value. Bed springs and chairs that have been broken beyond repair are the most sought after articles. Metalworkers also utilize as much as possible the

scraps of metal remaining from other projects. The consumer who purchases a made-to-order item from a metalworker is probably aware of the extent to which the producer must use recycled materials, because the consumer has usually made inquiries about the availability of supplies while determining the price of his order. In any case, scavenged material would not be a substantial part of a major project such as gates for a new house³.

Transforming machines and metal into useful products is one of the most complex activities found in the small scale industries of urban Sudan. The labor applied to this process is, at the Suq Sha'abi level, primarily supplied by the entrepreneur himself. There is, however, a growing trend towards employing apprentice and/or additional skilled labor to accelerate production. With the limited space available to the metalworker in Suq Sha'abi, it is difficult for more than two people to work side-by-side in a shop.

In all of the cases in this study skills of the entrepreneurs were developed during apprenticeships in one of the Industrial Areas. These men were apprentices in metalworking shops for an average of three years. Importantly, their masters stressed that they should learn all of the steps involved in the manufacture of a particular item, a trunk, for example, because the labor process was less divided at that time. Having this complete set of skills meant that once the apprenticeship was completed, the newly-trained metalworker could find

work, usually with the master who had trained him. In some cases these "journeymen" sought additional experience outside of the shop in which they were trained. This was often out of necessity due to a lack of work in their original shop or insufficient wages. Among the Suq Sha'abi metalworkers are those with experience as truck drivers, mechanics, and construction workers, all wage labor experiences with important skill connections to their eventual profession of metalworking.

The metalworkers of Suq Sha'abi would have preferred to establish themselves in the Industrial Areas where they were trained. But by the time this "generation" of metalworkers was ready for independent entrepreneurship, the trade had grown so that only this Suq Sha'abi area on the periphery of the city was available to them. The character of the residential neighborhoods surrounding Suq Sha'abi has also influenced the pattern of the metalworkers' growth in that these lower income areas do not provide as much business for metalworking as more established neighborhoods do for the Industrial Area shops. While the Suq Sha'abi metalworker generally looks at his work as a stepping stone to the more profitable production in the Industrial Areas, the troubled economy of Sudan and its region will not be able to support much more growth in this trade.

The metalworkers have a high degree of awareness about the state of the Sudanese economy and its impact on their trade. They do what they can to exert control over the

situation and at the Suq Sha'abi level of production this control is usually limited to labor costs. To this end, many of the metalworkers employ close relatives in their shops, primarily nephews. In Suq Sha'abi-level shops 34 of the 67 workers were related to the owner. "I don't need to pay my relatives during a business slump," stated a Suq Sha'abi entrepreneur. The family still expects to share in the economic health of its working members and this serves as a buffer against disaster in the Sudanese economy. Extra hands around the shop supplement the entrepreneur's own labor: metalworking has the physical requirement of coordinated activity for many of its heavy operations.

In return for their labor these boys are learning a skill that, in the least, will provide them with some access to wage employment. Each metalworking shop in Suq Sha'abi has two or three boys who are called "apprentices," which means they are paid less than other workers and, in principle, are not expected to do as much work. Apprenticeship in metalwork will be explored in more detail below.

While having access to cheap labor is an important part of the Suq Sha'abi metalworker's production, he must also obtain cash and credit for his work. The Suq Sha'abi producer is able to obtain a limited amount of credit from the maghalig, a rough percent of the business that the producer does with the dealer. He also depends on loans from relatives and the deposits that customers place on orders to

make his required purchases of materials. The small Suq Sha'abi producer does not do much subcontracting in metal work because of the risks involved in investing time and materials in building projects that are often not completed. The metalworker at this level of production does, however, take jobs outside of the trade to supplement his income.

Our first case study illustrates some of the problems at this level of production. Shortages of skilled labor, space, and at times, work orders, are the obstacles faced by such producers.

Case Study A: Noor, Metalworker in Suq Sha'abi, Khartoum.

The small corrugated iron shack that houses Noor's metalworking business was built to serve as a cold drink stand, a lucrative enterprise in this hot, dry city. Into this seven-by-eight-foot space Noor has crammed his arc welding machine, basic tools, a pile of rusting chairs that he intends to recycle, and a few back orders of chairs awaiting delivery.

"I'm spending more of my time going out to look for materials than I am in the shop these days," Noor said during one of our visits. At one point we went to see his cousin who said that there was a large pile of broken chairs and bed springs in their home village in the Gezira. Noor had to weigh the costs and benefits of hiring the transport needed to bring that material to Suq Sha'abi.

One result of Noor's extended searches for materials, including his negotiations with the maghaliq for lower prices, is that his assistant, a young man of 20 who has recently completed an apprenticeship, has more responsibility in the shop. "I'm not completely satisfied with the boy's work," Noor said. "but I have little choice; skilled workers are very scarce in Khartoum." Because customers tend to walk around the Suq to talk with entrepreneurs and look for the best workmanship, this situation could adversely effect Noor's business.

Another problem is that his very limited space does not permit him to store many back orders. It is common for a

customer to place an order and then not return to pick it up for months due to financial problems. Noor is thus burdened with a made-to-order project with no place to store it. Sometimes he must sell these chairs or tables, often incurring the wrath of the original customer.

This kind of problem contributes to the instability of Noor's business. In the seven years that he has worked in Suq Sha'abi he has gone out of business twice. In Noor's case this has meant padlocking the shop- one time for 14 months -and seeking wage work elsewhere. The last time he closed the shop he was able to find work on a Korean company's bank construction project in downtown Khartoum.

While the metalworkers of Suq Sha'abi have organized their production in a form as rigid as the sheet metal shacks that house their trade, another group of metalworkers present a greater variety in the ways they organize their work. Suq as-Saggana, which was described in the last chapter as an important locus for carpentry, is also home to 36 metalworking shops. This suq is well integrated into Khartoum's construction industry, which allows the Saggana tradesmen to make a higher income than those working in the cramped quarters of Suq Sha'abi. The 36 Saggana metalworkers stated that they made about 150 LS per week on the average while the 25 Suq Sha'abi firms claimed to make between 60-100 LS per week. While the constraints posed by the current Sudanese economy do not encourage individual metalworkers to "evolve" into successful businessmen, the tradesmen of Suq as-Saggana do represent an intermediate income position between Suq Sha'abi and the Industrial Areas, a distinction that is further evidence of the heterogeneity of petty commodity production.

The variety found in the organization of production in

Suq as-Saggana is primarily a function of the well-established nature of the trade in this market. These are the oldest metalworking shops in the Three Towns, and they are physically large, averaging about four times the space available to the metalworker in Suq Sha'abi. In the more than fifty years of Suq as-Saggana's existence metalworkers and other tradesmen have created an environment that supports almost any attempt to make a living from the building trades. These factors contribute to the coexistence of different forms of production. In several shops a bellows forge (koor) functions alongside electric welding equipment, a condition that exemplifies the maximization of available resources. Suq as-Saggana was established before electrical equipment came into common use in Sudan which accounts for the continued use of traditional tools of production. In contrast, the use of fire to heat metal is completely forbidden in Suq Sha'abi.

The different forms of production coexisting in Suq as-Saggana are not necessarily under the control of one entrepreneur. One large shop featured several different kinds of equipment, both manual and electric, all owned by different workers. They were being allowed to share the shop of one entrepreneur whose business was not large enough to require much space. He charged his friends a minimal rent, and in return they all benefited from their common visibility to potential customers.

This case also illustrates the thin line between

employment and self-employment so characteristic of petty commodity production. Because of the inequitable distribution of tools within this group some of the tradesmen often went to work for another member of the group- on a piece-work basis- when their equipment was inadequate for a particular project. The paid worker would immediately return to projects under his own control when the work was completed⁴. It should be made clear that while a cooperative-type system of production could potentially arise in this situation, these workers saw themselves as totally independent entrepreneurs when questioned about the arrangement.

Another production strategy is known as shirik or "partnership". This form of production resembles the "half-work" described in the tailoring chapter in that a metalworker who does not own any equipment "rents" machines and tools from a silent partner who is not involved in the trade. The metalworker leases the equipment by giving his partner half of his profits. Slightly more than 10% of the metalworkers surveyed were working under a shirik arrangement, and all of them were new entrants to the trade. The use of the term "partnership," instead of "half-work" indicates a certain amount of respect for the skill involved in metalworking, a skill that is generally perceived to be one of the most complex of the manual trades.

Most of the Suq as-Saggana metalworkers stated that

they owned the equipment that they used in their shops. It is also at the Saggana-level of production that we begin to see entrepreneurs taking on a more managerial role in their shops, leaving a substantial part of the actual manufacturing to apprentices and skilled assistants. The time invested in managing the business is used for acquiring materials at the best prices and arranging for wholesale projects. As with the Suq Sha'abi tradesmen the Suq as-Saggana metalworkers primarily accept made-to-order projects, but an increasing number of Saggana entrepreneurs are making tables and chairs in lots for sale to dealers. The Suq as-Saggana metalworkers do not have the equipment to produce the finest quality furniture, so their "mass-produced" items are providing stock for the new business phenomenon of "furniture-for-rent." A family planning a wedding, funeral/wake, or other large social function can arrange for the one-time rental of simple metal chairs from an increasing number of shops that specialize in supplying all the necessary equipment for such functions. Other items for rent from these dealers, such as poles to support orchestra stands or canvas partitions, are also the products of small scale metal workers.

Metalworkers who have expanded their businesses as much as possible in the space that is available to them are investing their surpluses in enterprises outside of the trade. The eight metalworkers from the Saggana survey who had purchased taxis or fruit juice stands felt that their

opportunities to expand their metal production were reduced by their effective exclusion from the Industrial Areas. They generally stated that the second income provided by the taxi service or drink stand was also important because of the instability of the trade in today's Khartoum. An indicator of this condition that emerged from the survey was that 55% of all metalworkers derived a substantial portion of their income from outside the trade.

The metalworkers involved in the most complex relations of production in urban Sudan's informal sector are located in the Light Industrial Areas of Khartoum and Omdurman. Licensing data indicated that there were approximately 270 metalworking shops in these two areas, 27 of which were part of this study's survey. In comparing these firms with less profitable ones in Suq Sha'abi or Suq as-Saggana the former employ more workers, make larger projects, have more sophisticated equipment, and have moved significantly towards ready-made furniture production. Stated income is another distinguishing factor between the Industrial Area metalworkers and their counterparts in Suq Sha'abi or Saggana. The Industrial Area tradesmen average between 175 and 200 LS per week, which is up to 50 LS per week more than the Saggana entrepreneurs and twice as much as the income of Suq Sha'abi-level metalworkers.

It is at the Industrial Area level of production that a stronger role for capital (in relation to labor) appears in the metalworking trade. The intensification of production

that accompanies increased demand for a product has turned the metalworking shops of the Industrial Areas into centers of innovation for Sudan. While competition among all petty producers is intense, the profit that may be made by innovative metalworking entrepreneurs has returned a spark of artisanal creativity to this sector of the industry. The workers in this trade represented in Suqs Sha'abi and Saggana must look outside of metalworking for badly needed income at the same time that the Industrial Area producers are building on their metalworking skills and equipment for even more complex metal-related projects.

There is a qualitative change as well in the relationships that develop between producer and customer at this level of production. We find that personal relations are not as important to the Industrial Area metalworker as they would be to the tailor, for example, for the simple reason that the metalworker's product is purchased less often, a fact that became clear over the course of time spent with these tradesmen. That is not to say, however, that the metalworker's clientele is less interested in their orders. Customers often draw pictures of desired designs or consult European furniture catalogs for ideas that the metalworker may reproduce.

The intensification of production and innovation are joint phenomena in a society that has little access to the sophisticated machinery needed for advanced capitalist production. In a sense, these two processes represent the

coexistence of modes of production in that innovation in this society requires the manual ingenuity associated with artisanal production, while the intensification of production requires a movement toward factory-like social relations. It is under such conditions that we found a metalworker using an original idea to create a small tool that bends metal in a unique way which allowed him to create designs for metal doors that could not be immediately duplicated by his competition. The urban consumers were quickly attracted to his designs which added a special touch to houses in a city otherwise characterized by dusty sameness.

The success of the metalworkers in the Industrial Areas is largely built on a strengthening of the factors that contribute to any petty producer's success. The most important of these factors would seem to be access to space in the Industrial Areas and access to capital. Having an established shop in an Industrial Area is important to the metalworker's trade because these Industrial Areas are centers that are known to the public, the suppliers are nearby, and the space was designed for large-scale operations. Most of the metalworking shops in this area were established before the construction boom of the mid 1970's. Some of these entrepreneurs worked as journeymen for older metalworkers and were able to obtain their mentors' places when the latter retired. The importance of the Industrial Areas as centers of production is emphasized

by the current heated controversy over the distribution of space in a new extension to the Industrial Area in Omdurman. While metalworkers from all over the Three Towns are demanding that they be allowed to establish shops in this new area it appears that almost all the spaces are going to those who already had a shop in the older Industrial Area and want to expand.

Educational background does not account for the economic differences between metalworkers, although it does, to some extent, distinguish them from the other skilled tradesmen. There is a larger incidence of only having attended khalwa or attained some primary schooling among Industrial Area metalworkers than of Suq Sha'abi tradesmen, but this is because these men tend to be older--in their 50's-- and would not have had as many opportunities to attend school as their younger colleagues. However, taken as a group, the metalworkers have had more years of schooling than carpenters or tailors, representing other skilled occupations. For example, 28% of all metalworkers surveyed had had some secondary school, while only 11% of carpenters and 15% of tailors reported similar attainments. Few had any technical education: 9% of metalworkers, 6% of carpenters, and 2% of tailors reported having attended a technical institute for at least six months. These data reflect the public and government perceptions of the importance and degree of difficulty of these trades, as formal technical training is state-supported. As literacy

becomes more important in the effective use of complex machinery, the metalworkers consider their educational experience to be time invested well.

A more tangible factor in the succession to successful entrepreneurship of the Industrial Area metalworkers is the use of capital and its reinvestment. Large shop ownership is the most common form of collateral for loans from the Industrial Bank of Sudan or Faisal Islamic Bank's "Skilled Trades Branch," but only the largest of the metalworking firms surveyed reported any dealings with these formal financial institutions. The Faisal Islamic Bank's new branch, convenient to the largest producers in the Omdurman Industrial Area, is a potent symbol of the availability of capital to only the highest levels of production. Due to the Faisal Bank's adherence to the Islamic prohibition against the charging of interest, all loans are variations of "joint venture agreements," and loans are most often used to import equipment from Europe or the Far East.

As with the Saggana metalworkers, the tradesmen of the Industrial Areas depend primarily on credit from suppliers for their businesses. Half of the Industrial Area metalworkers reported obtaining credit from the maghaliq, while only two said that they relied exclusively on family loans. Deposits on orders are another important source of cash for these firms.

Overseas work is not as important a source of capital to Industrial Area metalworkers as it is to the less

profitable forms of production. Migrating to work in the Gulf or Libya has not been a significant part of this older generation's experience, even though migration can be a means of obtaining equipment. The subject of migration arises most often among this group of producers when discussing the scarcity of skilled labor for their shops.

These Industrial Area metalworkers are able to use their labor outside of their shops and within Sudan in order to accelerate the capital accumulation process. We found that the more successful entrepreneurs were able to contract their labor to major construction projects in the Three Towns because of their relatively sophisticated skills and because many of these projects require that workers bring their own equipment. Sometimes the senior metalworkers are also asked to bring along their skilled assistants, who then obtain valuable experience and contacts for future contracts. The pay is so remunerative (and generally hidden from the tax collector) that the Industrial Area metalworkers can afford to close their shops when there is an opportunity for construction work. There are risks involved in this kind of work which tend to discourage the Sha'abi and Saggana level producers. These risks revolve around the problem that often workers are not paid until the completion of a project. Many projects are left unfinished due to the financial instability of the the project's backers or because of the great amount of time it takes to import basic building materials. Many of the metalworkers

involved in this kind of contracting have been taking these risks since the late colonial era when they participated in the construction of much of Sudan's infrastructure.

The ability of the Industrial Area metalworkers to hire cheap labor is another factor in their success at enterprise. These larger firms had an average of 3.8 skilled employees and three apprentices at the time of the survey. Having nearly seven workers with various degrees of skill and combined with other resources, permitted many of these firms to abandon made-to-order work completely for the ready-made furniture trade. The employment issue will be discussed in more detail in the next section.

The rise in the number of employees in a shop and the transformation to ready-made furniture production, accompany the growing managerial role of the entrepreneur as he himself performs less and less hands-on labor. The development of ready-made furniture production was a natural accompaniment to the urban housing construction boom of the mid 1970's. The acquisition of skilled labor and supplies in bulk are daunting tasks in Khartoum and require that the owner of a firm producing this furniture spend his time managing these inputs. Typically, a metalworker would assign tasks to the senior skilled worker in his shop in the morning and then spend the rest of the day running the business. The intensification of production is best illustrated by examples of entrepreneurs offering incentives, such as increased pay or bonuses, to their

workers to move a particular project faster. Some of the larger firms were found to be offering incentives to their best workers to persuade them to stay in Sudan rather than migrate. Employers who mentioned these incentives, however, usually said that their offers had little effect; the lure of high salaries in the Gulf was too great.

The outlet for the production of ready-made furniture is the expanding urban commercial phenomenon of the "showroom," described in the carpentry chapter. A few metalworking entrepreneurs were found to be opening their own showrooms for the sale of furniture, but most were establishing contacts with merchant/dealers.

The following case study links several of the strands that make up advanced metalworking production. The need for the producer to manage labor and equipment inputs in order to ensure a profit is the main concern of the entrepreneur in this case study.

Case Study B: Yusef, Metalworker in Omdurman's Industrial Area.

When the electrical power is flowing, Yusef's metalworking shop experiences a frenzied pace. He has six people working for him- two skilled workers and four apprentices -and they each have assigned tasks in the manufacture of doors and bed frames. When the electricity is cut, which can occur as often as three or four times a week, most of the work must stop. Yusef's skilled workers, who are paid by the piece completed, say that they have their most serious thoughts about trying to obtain work abroad during the power cuts.

Yusef sometimes admits to being overwhelmed by the speed with which his business expanded after he took over the shop from his retiring "teacher" in the trade. We asked about his attitudes towards training his apprentices and he

said, "I'm still learning this trade!" There is some frustration in this remark because Yusef does not yet feel completely competent in using the necessary equipment. The opportunities for acquiring the specialized tools and machines are so limited that the entrepreneur buys them when he can, even if he and/or his workers lack the skills to properly operate the equipment.

Learning about the proper use of the equipment is a very informal process with no instruction provided by the distributors. Yusef has relied on friends and neighboring colleagues for help in the past. It is not unusual to see a large, dusty piece of equipment sitting unused in a corner of a shop, acquired while the shop owner was abroad. Of course, the problems of spare parts and machine repair also cut into the shop's efficiency.

Industrial Area shops such as Yusef's best illustrate the continuum of small scale production, retaining certain Sudanese characteristics throughout the production levels. Part of the relatively high income Yusef makes in his business is derived from his ability to deliver a touch of tradition to the urban Sudanese consumer: Yusef's doors have been noted for their iron decorations, reminiscent of the old Nubian style of house adornment. This could also be seen as the manipulation of Sudanese tradition for a clever marketing strategy. Another symbol of the coexistence of modes of production that typifies small scale industries was witnessed in Yusef's shop: peddlers with horse-drawn wagons were often found in the shop using Yusef's tools to repair their wheels. The blacksmithing origins of this trade are thus still evident.

The ultimate managerial role emerging from metalworking is that of the magawil or building contractor. Metalworkers who have turned over their day-to-day production to skilled assistants have gone into the business of arranging for the construction of residences for the wealthy. The magawil, from the Arabic verb "to talk", takes no part in the construction process himself but arranges, through his contacts, for the painter, mason, carpenter, and other tradesmen to come together for the project. There is usually considerable financial risk involved for the magawil because he is responsible for materials procurement, the prices of

which can be very unstable⁵.

Housing construction does provide significant employment opportunities for both simple laborers and entrepreneurs, the latter having some share of the means of production (such as the magawil and metalworkers involved in contract work), but it is not a sector organized at a higher level in Sudan. Most housing construction, no matter what the social class of the eventual occupant, reflects the "informal sector" nature of its workers, because projects are designed on an individual⁴ basis and vary a great deal in costs, duration, and numbers of workers required on the project⁶.

This "informal sector" aspect of metalworking is seen in the maintenance of the trade as a very individualistic and highly competitive craft. We have not yet seen trends of the larger firms buying the smaller ones, entering into cooperative production arrangements, or even raiding the labor of the smaller firms. The small tend to stay small and the larger firms stay large, reflecting the narrow nature of the boom in housing construction in an otherwise stagnant economy. There is a trend, however, toward horizontal diversification. On display in the furniture showrooms of Khartoum and Omdurman are an increasing number of products of joint metal-carpentry work, a metal chair with wooden arms, for example. This development has begun with metalworkers constructing a chair and then buying the arms wholesale from carpentry shops.

B. Employment

To examine the employment dimensions in metalwork is to acknowledge that the trade has grown beyond its artisanal roots, in which the owner of the tools of production applied only his own labor to create simple commodities. The products of metalwork and its current technological organization prevent the entrepreneur from working alone. He must recruit or otherwise attract sufficient labor to complete the production process. In the last section we identified the metalworker as a relatively successful petty commodity producer. By looking more closely at those workers in the employ of metalworkers we expand our understanding of the growth of an urban laboring class.

Under the "boom" conditions that metalworking and related small scale trades experienced following the global rise in oil prices, labor was able to find work easily in the informal sector. Workers were not treated equally, however, once they entered these trades, and considerable social differentiation resulted, more complex than that of the distinction between employer and employee.

The intensification of production that has transformed a made-to-order furniture business into a factory-like process has also changed the specific tasks in the metalworking shop and the distribution of those tasks. At

the top, the entrepreneur acquires materials and manpower and ensures that there are sufficient work orders for his shop. He may participate in the production process himself or, increasingly, rely on trained assistants to manufacture the products of the firm while he assumes a strictly managerial role.

Metalworking entrepreneurs, like producers in all skilled trades, are increasingly concerned about obtaining adequate numbers of workers. The high wages that lure skilled labor to the oil-producing states in the region are listed by virtually all metalwork entrepreneurs as a major problem facing their trade; however, only seven Industrial Area metalworkers of the 46 respondents to the survey stated that they could use more help in their shops. Most of the metalworking firms were operating at full capacity, and labor migration serves both as an important topic of conversation and to symbolize other ills affecting the economy. The problem of migration of skilled workers from Sudan is beyond the scope of the present study; however, the opportunities for such migration have rapidly declined as the price of oil has fallen.

Urban metalworking does have a close connection with migration, but it is primarily on the receiving end: youths from Sudan's peripheral regions, the south and the west, continually travel to Khartoum to seek work in such enterprises. The labor needs of most carpenters and metalworkers are small and specific, which prevents them

from employing large numbers of these youths who often fall into the category of "casual" workers (Bromley and Gerry, 1979). There are only three or four ready-made furniture workhops in the Three Towns that have enough business to employ these boys for sporadic periods of intense work.

These migrant youths, only recently mobilized from household production in Sudan's most rural areas, may be found working alongside apprenticed youths. Unlike the apprentices, who will be described in the next section, these boys are not integrated into the skilled labor force. They are assigned the most simple of repetitive tasks, such as winding colored plastic tubing around chair frames, and do not learn all of the steps required to make a chair. The aspirations and cultural identities of these two groups of youths- apprentices and workers from the South and West -stand in stark contrast and can be distinguished every evening at the gahwas, the coffee shops of the poorer neighborhoods, where each seeks out their linguistic mates to spend the evening's free time.

While some of the boys from Sudan's periphery are interested in finding a job that will expose them to a skill, the vast majority are seeking immediate income for the survival of their families. By and large these youths fare better than most new migrants to Sudan's capital. Metalworkers and carpenters indicate that they turn away five or six employment-seeking boys each day. Many of these youths eventually become part of the self-employed service

sector, such as car washers, or continue their urgent search for casual work in other types of petty commodity production.

As was discussed in the previous section, metalworking entrepreneurs use the input of labor to control their costs. Cheap labor is important in all kinds of petty commodity production, but in metalworking it is concentrated at the Suq Sha'abi level, where family labor makes up about half of the work force in the shops. In Industrial Area metalworking shops the presence of family labor is much more rare, as is the intergenerational transfer of skills. Here, entrepreneurs depend on word-of-mouth to recruit skilled workers, asking friends or other skilled workers for knowledge of young men seeking such work. Most metalworkers also employ their former apprentices for varying lengths of time following training. Because specific qualifications are necessary to perform many of the tasks in metalwork, especially at the level found in the Industrial Areas, the use of their own former apprentices guarantees the entrepreneur a known skill level.

The most significant aspect of the employment issue within the metalworking trade is that there are more categories of workers than ever before. While none of these categories are exclusive, with duties often sliding from one category to another, a certain hierarchy of skills is acknowledged by those working in the trade. At the bottom are, of course, the apprentices and casual workers who have

been hired to fill rush orders. Next are semi-skilled workers who are paid by the day, their income varying with the productivity of the shop. The workers with the best skills are paid by piece completed, which can be very remunerative in one of the Industrial Area shops. A typical skilled metalworker could complete three or four pairs of metal gates per week and be paid 50 LS by his master for each pair. Important experience and good wages can also be gained from a sanay's (journeyman) opportunity to join his employer on sub-contracted construction projects.

These highly skilled sanay may circulate among metalwork shops seeking the best wages for themselves, as we saw with the very mobile tailors. Like the tailors who circulate from low-income to higher-income market areas, these skilled metalworkers do not own the primary tools of production. Their skills are in demand and they try to accumulate capital by using that skill acquire machines for their own shops. Some sanay have elaborate plans from the moment they begin their apprenticeships: to learn a skill, migrate for higher wages, and return to Sudan to open a business. There are obstacles, however, along this path. In order to obtain a visa to migrate to Saudi Arabia, for example, one must have a contract of promised work in that country. Contracts are made by agents, who are usually Sudanese, of the Saudi firms who explore Khartoum in search of skilled workers. These agents particularly seek workers who can produce a "certificate of experience" from their

former master or employer.

This scheme actually describes an "ideal" for most youths currently involved in metalwork training. As the oil boom ends in the 1980s, the opportunities for well-paid work in the Gulf states are declining. A more ominous note is that the conservative governments of the Gulf region are becoming reluctant to welcome workers from their poor, Arabic-speaking neighbors for fear of political disturbances. Thus the skilled workers in the shops of today's Khartoum will be unable to make the same journey as their older brothers did to acquire capital and equipment. For the short term, at least, they are stuck as wage laborers in a trade that has seen its economic zenith. The following illustrative case study will conclude our discussion of employment in metalworking. The daily life of a young man who does not own a workshop is detailed.

Case Study C: Ali, skilled worker in metal shop, Suq as-Saggana.

Ali has been working as a sanay (skilled worker or "journeyman") in this old Saggana metalshop for 18 months. He completed a two year apprenticeship in a nearby shop but was unable to find work immediately in the trade. He attributes the slowness of his job search to problems of communication between shop owners. Ali was able to fill the intervening time working as a clerk in a hardware store. This was actually a good choice of temporary employment because the store owner gave him a few tools that had been abandoned by departing metalworkers, and thus he began his own preparations for independent entrepreneurship.

His contacts in the supply-end of the trade led him to his current position where he supervises two apprentices. Work orders in this Suq as-Saggana shop are not coming in steadily, and there are continual stoppages due to power cuts, but his boss gives him a stipend every week that he

does not work. Ali is normally paid per day worked, and the stipend serves to confirm the shop owner's commitment to him. These mid-level shops cannot afford to lose what skilled labor they can find.

One of the major problem areas for Ali and his co-workers are the hazardous safety conditions in metalworking. Safety glasses are expensive and are worn only by a few of the men who use acetylene torches and welding equipment. Despite the sharp pieces of discarded metal that cover the shop floor, almost all of the workers wear nothing but cheap rubber sandals on their feet. Many of Ali's friends in both carpentry and metalworking bear the wounds and scars of their dangerous work. The shop owners do not have the time, money, or obligation to ensure their workers' safety, and the owners themselves face the same dangers when they work side by side with their assistants. While a certain machismo swagger is a common characteristic of the young men working in the gritty workshops of urban Sudan, the working conditions are a bitter and obvious indicator of the exploitation common to petty commodity production and the varying laboring conditions in the global economy.

C. Apprenticeship

In the preceding section the focus was on workers in the small scale metalworking industry who are primarily wage laborers. This section will describe workers who are ostensibly learning the trade at the same time that they assist in the production process. While industrialization has eroded the traditional apprenticeship training system in many trades, it has been retained in metalworking and thrives in a Sudanese context. The need for cheap labor, the lack of formal technical training facilities, and the "extra hands" that are a necessary part of small scale metalworking production all support the maintenance of this institution.

The Sudanese government's role in vocational education

has been in the establishment of seven vocational training centers which graduate about 700 students every three years. With about 50% of all graduates leaving these secondary-level institutions immediately for work abroad, the remaining graduates hardly fill the needs of large scale industry and government, let alone the burgeoning small scale industries. Under these circumstances, and yet predating the establishment of the vocational centers, the metalworking shops have been providing skill training to hundreds of youths each year. At the same time, the small scale metalworking entrepreneurs are conscious of these "rival" training programs, although only 8% of the entire sample of metalworkers had any exposure to formal vocational training. One metalworker was so frank as to remark, "In the workshop the master only wants the labor of the apprentice; he is not interested in training the boy." In another case, a master stated that in the vocational schools boys learned "scientific methods" which were not taught in workshop apprenticeships. These comments reflect the general feeling of inferiority among manual workers when asked about formal educational institutions. The public, too, tends to view vocational education as a track for students who fail the university preparatory entrance exam and not necessarily as a route to a manual trade.

The vast majority of today's metalworkers were trained as apprentices in small workshops. The homely image of father and son toiling and learning together, however, has

been disappearing for some time: only 20% of the sample of metalworkers apprenticed with their fathers. The remainder served apprenticeships with metalworkers from their home regions or from their circles of acquaintances. Most apprenticed in the Three Towns, establishing the long-term urban presence of this trade.

Although many of today's apprentices state that they chose metalworking because of a strong personal interest in the trade, their responses to other questions could indicate that there are a number of reasons for their choice. In many cases apprentices stated that they entered a metalworking apprenticeship because they had wasta, or influence, from a friend or relative. In other words, they knew someone who could get them an apprenticeship in this trade quickly. About 66% of the metalworking apprentices surveyed indicated that their fathers had urban occupations, which would broaden their sons' access to information about apprenticeships. Only one third of the apprentices were rural migrants, and it took them as long as two months to secure an apprenticeship in a shop.

In the urban setting another important factor in the decision to learn a skilled trade is a boy's educational background. When asked about their schooling most apprentices responded that they either did not pass the exam for entrance to the next level, or that they "disliked school" or "had problems in school."

The master metalworkers tend to confirm the recruitment

details related by their apprentices. When asked about how they chose an apprentice, most masters stated that they must "know the family." In a sense, this condition represents the exclusivity of the trade. By knowing the family of the apprentice- which is common to apprenticeship throughout Africa -the master maintains the class and status integrity of the trade. Elsewhere in Africa, ethnicity may also play a role (McLaughlin, 1979; Peil, 1979), but in Northern Sudan these traits are blurred. As another paternalistic feature of Sudanese society, the master also makes clear that their prospective apprentices must have "good morals." When asked how a boy's morals were determined, one metalworker replied,

"You know his family, so that gives you a good idea. Then you watch the boy's behavior for a couple of days and his character is even more clear. If you don't like what you see, you let him go."

Apprentices may begin their training as early as age 10, but most entering the metal trade are four or five years older. This reflects both the stage when the majority of youths leave school- if they are to leave - and the masters' desire to have literate apprentices. At the age of 14 urban youths are likely to have completed primary school and therefore have adequate literacy and numeracy skills for the purposes of metalworking. The reading of equipment manuals and some bookkeeping are becoming increasingly important in the trade. Sometimes the need for these skills becomes

apparent to the apprentice after he has left school and begun training in a trade. We found that a few boys who had not completed primary school were taking part in various adult education programs in addition to their apprenticeships. These part-time students could also be reluctant metalworkers-in-training who hope to get back into full-time formal schooling.

Discussion with masters and apprentices on the tasks assigned to the latter during their training reveals that considerable change has taken place in the institution of apprenticeship. It was also clear that many masters have idealized their own experiences in comparison with today's conditions. A typical comment from a metalworking entrepreneur was, "In the past apprentices had an interest in learning and working. We worked with our hands and often went hungry. Today my apprentices are only interested in the money." Apprentices in metalwork are paid what is known as "subsistence"- two or three pounds per week -plus 50 piastres per day worked. They also share the master's breakfast and tea breaks.

Another change in the master-apprentice relationship is reminiscent of the stereotype of apprenticeship. Masters often stated that the treatment they received at the hands of their own masters was very harsh; they also said that such beatings would not be tolerated by today's youths. None of the apprentices surveyed reported any corporal punishment, but it would be difficult for them to confess to

such treatment while their masters were within the range of listening.

The length of the apprenticeship in metalworking has also changed over the years. The entrepreneurs reported serving an average of 3.5 years in training, but some periods were as long as 11 years. The lengthy apprenticeships were common with older metalworkers and with carpenters who had trained with foreigners. Lengthening the time of apprenticeship during the colonial era was one way of keeping Sudanese out of trades that the foreign entrepreneurs wanted to control. When we consider today's circumstances, more light is shed on this past situation. There is often disagreement between the master and the apprentice over the timing of the completion of the apprenticeship. This can be seen in both the contemporary and pre-independence periods as another means of maintaining access to cheap labor. The metalworkers usually admit that they can train an apprentice to an acceptable level in about one year; however they also say that their apprentices stay with them for about two years. The normal resolution of a disagreement over the ending of an apprenticeship is that the confident youth leaves to look for work as a skilled laborer in another shop.

Masters who want to retain their trainees for as long as possible will often make promises of gifts of equipment or help in the eventual job search to the apprentices. While such offers may be sincere, and are reported in research

from other parts of the continent (McLaughlin, 1979; Peil, 1979), it would seem that this is another way of maintaining cheap labor. The case study that follows offers more detail of the life of an apprentice in Khartoum.

Case Study D: Daoud, apprentice metalworker, Industrial Area, Khartoum.

Observing Daoud at this early stage of his apprenticeship is a somewhat monotonous chore: he spends the workday bending metal strips to be used in the decorative part of a window grate by pounding them over an anvil with a hammer. The monotony of Daoud's task is shared with two of his fellow apprentices who also bend metal strips. The three are periodically observed by a mwaliim, a skilled worker in the shop who is several years beyond his apprenticeship.

Daoud is thirteen years old and became an apprentice at his father's suggestion; he was tired of hearing reports of his son's fighting at school. Daoud spent his first month in the shop by watching procedures and running errands for the other workers. This bending of metal strips activity is the first metal task he has been assigned. In another three months he will work directly with a mwaliim, building metal gates for the walls that surround the urban Sudanese home.

The skilled workers in the shop seem attentive to the activities of the apprentices. They have been recently chastised by the shop's owner for the high number of tools that have been damaged or mishandled by the apprentices. Training in these small workshops is training at its most practical level, with the entrepreneurs conscious of the connection between good skills and good products.

The apprentice in the successful metalworking shop is, in some ways, an excellent marker of the economic direction of the firm. In order to ensure his profits, the master takes care to certify the boy's skill. At the same time, the apprentice is an attentive learner because he recognizes the potential for a good income in this trade. But the

precarious economy of Sudan paves a difficult road for the apprentice to follow in the succession to entrepreneurship.

D. Spatial Concerns and Relations with the State

The metalworking firms of Khartoum and Omdurman are small in individual size, but as an aggregate they represent a significant contribution to Sudan's urban economy in terms of products, employment and income. In a continuation of the colonial state's policy of placing obstacles to indigenous industrial development in order to preserve markets for imported goods, the Sudanese state attempts to regulate the metalworking trade for the state's benefit. However, the heterogeneous and widely-scattered nature of this small scale industry- partly a result of state policy -tends to deter control by a largely inefficient bureaucracy.

The most significant area of conflict between small scale metalworking firms and the state is the issue of space. Access to sufficient and convenient space for the purposes of production is a problem that connects with all other elements of the relationship between petty commodity producers and the state. The establishment of "light industrial areas" in the Three Towns during the late colonial period was an early signal that the support given to metalworking would be concentrated at the most profitable

end of the trade, at the expense of the smaller producers. The bourgeois elements that own the firms in the light industrial areas are an important part of Sudan's ruling class structure⁷.

The light industrial areas in Khartoum and Omdurman provide the only space that is sanctioned for metalwork. Firms in these areas are strictly licensed and patrolled by a local government agency, al majlis as sha'ab al medani or "People's Town Council." An officer for the Industrial Area's jurisdiction maintains a file on each firm and is responsible for issuing licenses on an annual basis.

The smaller and less-profitable metalworking shops in Suq Sha'abi, Khartoum, are also licensed but are illegally occupying the suq. As was discussed above, the Suq Sha'abi was originally meant to provide temporary space for small retailers evicted from downtown Khartoum in 1974. The population growth of the Three Towns and the demand for products related to all levels of the construction industry have encouraged the development of these small firms, but the government has not been supportive of this development.

Workshops in Suq Sha'abi are regularly harassed by the police of the People's Town Council (al biladiya) and are often deprived of electricity service. Health, safety, and protection against fire are legitimate concerns of the government, and the cramped quarters of Suq Sha'abi do pose such hazards. Rather than attempt to alleviate these problems and provide a favorable environment for small scale

industrial development, the government only reminds the Suq Sha'abi entrepreneurs that they may be expelled at any time. This kind of harassment and neglect reinforce the precarious, "informal sector" image of this type of production. The firms cannot plan for future business expansion under such threats. One metalworker complained, "We can be told to leave Sha'abi tomorrow. We are not recognized as growing businesses by the government. This instability hurts us." The Suq Sha'abi metalworkers are very conscious of the dichotomy that exists between them and the Industrial Area firms.

Some small scale metalworkers try to avoid the harassment faced by the Sha'abi firms by establishing shops in residential areas. This movement is also illegal, ostensibly for health and safety reasons, and such shops are not marked by signs. But one may walk through working class residential neighborhoods and hear the clanging of metalwork production coming from behind the high walls. The government was enforcing zoning regulations more carefully during the time of this research which had the effect of forcing these clandestine workers from the residential areas back to another illegal area, Suq Sha'abi.

The state has provided a channel for some degree of communication with small scale metalworking through a government-sponsored union. The General Union of the Owners of Small Scale Industries was established in 1974 as part of the then ruling party, the Sudanese Socialist Union.

Metalworking and carpentry represent the largest of 11 skilled trades within the Union with 256 and 258 members respectively. With a government bureaucrat as its secretary, the Union's most important activity is the distribution of parcels of land in the new extension to Omdurman's Industrial Area. The 514 places in this extension have all been claimed, most by entrepreneurs from the original Industrial Area who wish to expand their businesses. Many of the metalworkers interviewed in the course of this study expressed bitterness at their inability to obtain access to this excellent location.

Suq Sha'abi metalworkers are not officially recognized as such, so they are therefore not permitted to join the government-sponsored union. The response of these producers has been to form their own organization, which is also not recognized. While there have been some attempts by the organization's leadership to present the group's complaints to the local government, the primary activity of the organization has been to act as a welfare society. Each member pays two pounds per month into a fund that may cover members' funeral expenses, hospital visits, and other emergencies. Any attempt by this organization to engage in more political action, such as demanding adequate facilities for their production, is stymied by the real threat of expulsion from Suq Sha'abi all together. This Suq Sha'abi association more closely resembles the less formal trade groupings of rural Sudan than the government-sponsored

union. The final case study of this chapter describes a continuing conflict between the state and the petty producers.

Case Study E: Metalworkers in Omdurman's Industrial Area.

Government attempts to control small scale production are evident even in the sanctioned Industrial Areas. Urban regulations require that all metalwork be performed inside the workshops. But producers usually make use of the streets and alleys outside of their shops because of the hot and cramped conditions inside. Often the producer cannot use his workshop at all because it is packed with back orders.

In order to enforce these regulations two truckloads of soldiers were sent to a crowded street of metalworkers during one of our visits to the area. The workers were forced off of the street at gun point and into their shops but were back at their forbidden work as soon as the soldiers departed. "Give us services in the new extension, and we'll go there with our work," one metalworker offered. "Our electricity is cut off after 5:00 p.m.. We rarely have water. How can this country develop industry under such conditions?" he continued.

The government also faces pressure from residents of nearby neighborhoods who demand some electrical power for at least the evening hours. Residential areas sometimes go for days without any electricity. But the limited resources are not distributed efficiently and neither the petty producers nor the neighborhoods are satisfied. Efforts to repair the electricity problem by the officials responsible for industrial development are stalled by officials of other government agencies who at the same time, are trying to consolidate all the petty producers into one area. The small scale manufacturers are becoming more vocal about the high taxes they are forced to pay on their sales, which do not seem to provide any services from the state. Like their carpenter colleagues, many metalworkers comment that they find this "development tax" ironically named.

The relationship between metalworkers and the state is not then only a matter of deliberate oppression. The narrow view of "industrialization" of a poor nation's inefficient bureaucracy also contributes to this urban conflict.

E. Summary

Our discussion of small scale metalworking enterprises has centered on the areas of increasing income differentiation between firms and the emerging social relationships within firms. These phenomena have been determined to a large extent by the lack of an industrial base in Sudan. Metalworking that is small in scale has benefitted from the surge in housing construction. The diffuse nature of this new area of investment has permitted scores of tiny firms to profit independently from contracts in the sector.

The contrasting atmospheres of Suq Sha'abi and the Industrial Areas symbolize the differentiation between metalworking firms. The cramped quarters of the former, distant from the main lines of communication in the construction industry, do not allow for much product variety or substantial increases in production. The firms in the light industrial areas, on the other hand, are moving from made-to-order to ready-made furniture production.

While the Suq Sha'abi and Industrial Area firms may vary in the amount of capital that passes through the production process, in both cases the use of labor remains intensive and the primary means of production, a distinguishing feature of petty commodity production.

Because metalworking is a dynamic form of petty commodity production, new roles and levels may be created for labor, but its relationship to capital remains the same.

Apprenticeship, an institution found in traditional handicrafts, has been retained in metalworking as part of the labor pool. The opportunities for youths to be apprentices continue because of the low cost to entrepreneurs and the lack of other programs for skill training. Apprenticeship is an important part of contemporary petty commodity production and has seen little change in its practice in the post-colonial era. The direction of change has been in the declining opportunities for the apprentice to repeat his master's success in succeeding to independent entrepreneurship.

Arching over the dynamics of metalworking within and between firms are the evolving relationships with the state. Despite a lack of coordinated planning, the organs of the state, such as the sponsored unions or the local government agencies, are determining the direction that metalwork is taking. Because the economy is precarious at this time, this has meant little more than a solidifying of the positions of the profitable metalworking firms and continued frustration for the smaller ones.

While small scale metalworking represents a trade that may appear to have the potential to provide a base for industrialization in Sudan, it is prevented from doing so by severe constraints. Difficult access to raw materials

markets, the "boom" nature of the trade's success (and the strong possibility of a "bust"), and the dependence of the housing demand on the influx of development assistance personnel and strong economies in the oil-producing countries, all signal that metalworkers can only continue to prosper through individual strategies of access to capital and labor.

NOTES

1. Personal communication from Professor Lidwien Kapteijns, Wellesley College.
2. See al-Shahi, 1972, for more on the halab; also see Kuhn, 1970, for more on the halab in Omdurman.
3. See Gerry, 1974 for a discussion of recycling, scavenging, and "recuperation," in the informal sector of Dakar.
4. See King, 1977, for a description of a similar situation in Kenya.
5. See Sorbo, 1985, for a description of this kind of activity in rural Sudan.
6. See Kameir, 1980, for more on urban housing construction.
7. See Mahmoud, 1984.

CHAPTER VII

SUMMARY, CONCLUSIONS, AND IMPLICATIONS FOR SMALL SCALE INDUSTRIAL POLICY

This study has detailed the organization of production in small scale manufacturing in urban Sudan, focusing on producers' strategies to accumulate capital in the face of a stagnating and dependent economy. The discrete case studies of tailoring, carpentry, and metalwork are a contribution to the growing literature on informal sector activities in Third World cities. The research presented here answers the calls in the literature to "disaggregate the informal sector in order to avoid meaningless generalizations" (Bienefeld and Godfrey, 1975) and to give new attention to the "internal mechanisms of the 'subordinate mode'" instead of the impact the dominant mode has had on the subordinate one (Bromley and Gerry, 1979). Those "internal mechanisms" are, perhaps, most clearly evident in the case studies featured in this research, providing career histories of African workers, a need for which has also been noted in the literature on Third World development.

This chapter offers brief summaries of the major characteristics of the three trades studied - those elements of production that have experienced significant changes - which include some concluding generalizations about each trade. A speculative assessment is made of class formation in small scale production and the chapter concludes with a discussion of the study's implications for development policy in this area.

I have described in some detail three important trades in the urban informal sector, representing what are generally acknowledged to be the most ubiquitous types of modern manufacturing in most African cities. Tailoring, carpentry, and metalworking were selected for study because these three trades produce commodities which are used by most urban consumers. There is little uniformity in this production however, with tailors, carpenters and metalworkers employing a wide variety of strategies in their businesses, necessitated by their differing social locations in relation to capital. This diversity also attracted my interest to the selected trades because a main goal of the research was to demonstrate the heterogeneity of the "informal sector."

My focus has been on social relationships in petty production rather than attempting to compare producers by measuring incomes, a difficult task at best in work settings that are outside of regular (factory) wage employment. These relationships, resulting in many levels of stratification

within the trades, tie the small scale producers to the national and world economies through sub-contracting and rental arrangements, the importation of expensive equipment and materials, and dependence on the state's regulatory powers. The shifting statuses inherent in petty production also make difficult the assessment of true ownership of the means of production.

Sudanese society is reflected in the uneven distribution of resources throughout these three trades. At the top, there are perhaps 20 owners of large carpentry and metalworking shops who mass produce fine furniture and build much of the capital's first-class housing. Their workers, averaging between five and fifteen per firm, are the closest approximation of stable wage work found in informal sector production. The owners themselves have played a minor role in supporting the state structure, serving in the quasi-official "unions" that regulate the bigger workshops.

While such establishments dominate petty production, attracting skilled labor from smaller firms and monopolizing space and other resources, they are themselves dominated by foreign firms and capitalist producers in Sudan. The lack of effective political power among the bigger carpentry and metalworking shops was demonstrated in the long battle to stem importation of European furniture. Most of Sudan's large scale industry has been de-nationalized in recent years and turned over to private capital. Virtually all

major construction projects in Sudan are in the hands of European and Korean firms.

The remainder of small-scale producers provide basic furniture and clothing for the urban middle and working classes and are themselves representative of those groups in terms of income. While such producers are increasingly able to offer wage work, it is far from stable employment. During slow business periods, the small producers themselves are sometimes found seeking work in the larger workshops, leaving their employees without unemployment insurance or other compensations typically found in stable wage work situations. These two groups - small firm owners and their workers - are distinguishable only in the ownership of the means of production. One piece of power equipment and a few tools, or perhaps a sewing machine, is all that separates the entrepreneur and his employee. The entrepreneur is dependent on larger firms for finishing his work on advanced equipment, and the employee aspires to accumulate enough capital to join his boss in "independent" entrepreneurship. The worker may spend part of his career trying to produce commodities on his own, borrowing tools, renting a simple shack, but drifts back to the wage-earning status as production becomes less feasible. Often it is the individual's lack of appropriate personal relationships, for loans or use of space or equipment even on a temporary basis, that prevent him from establishing successful production.

The central purpose in presenting the data on petty commodity production in urban Sudan in case study format has been to demonstrate the variety and subtlety of relationships in the workshops and to cross cut the income levels that exist in each trade. The petty commodity production approach to a theoretical understanding of the urban economy as described in Chapter II, tends not to distinguish between trades or activities in this way both because it views subordinate constructs as homogeneous and because of the lack of empirical evidence due to the newness of the approach. In contrast, I believe that it is particularly important to view the trades from an holistic perspective because tailors, carpenters, and metalworkers do not generally remain at one production or income level throughout their careers, but exercise considerable mobility in their trades as opportunities expand and contract. Also, the historical origins of each trade have placed them in different positions in regards to the world economy.

There are poorer and wealthier producers than tailors, carpenters, and metalworkers in this "continuum of productive relations." The simple vendors, shoe repairers, or preparers of street snacks, for example, face far too much competition and add far too little value to their product in the urban market to accumulate the capital needed to improve their productive positions. The capitalist producers at the other end of the continuum effectively

block further accumulation by those beneath them by monopolizing the scarce social and economic resources.

Case Study I: Tailoring

The concept of productive strategies was introduced in the case study of tailoring in order to give full credit to whatever attempt the individual makes in shaping urban society. The detailed, useful scheme of employment levels in petty commodity production suggested by Bromley and Gerry (1979) and described in Chapter II, does not refer to "strategies" in this mode because this literature views petty producers more as subordinate "victims" of the dominant economic system. This is not to say that it was not clear to me that tailors face numerous obstacles in accumulating capital. Their formerly independent entrepreneurship is increasingly undermined by the relative ease with which a producer with access to capital can establish the "mass production" of clothing by acquiring as few as two sewing machines and one helper. Other tailors employ numerous strategies to move toward capital accumulation, not always achieving the limited success of the small-scale ready-made producers.

Tailoring is so common among African small scale manufacturers that the sight of man-with-sewing-machine has become an informal sector stereotype. Close examination of the trade revealed, however, that urban tailors may be classified on the basis of three types: those who own their

machines, those renting machines and working alone, and those employed by either machine owners or renters to do piece work. More than half of the tailors interviewed in this study were found to be renting sewing machines, but 54% is thought to underestimate the numbers of machine renters, their extreme mobility making them difficult to enumerate.

I described the process by which tailors circulate through the economy, taking advantage of better commercial locations for their trade, in order to accumulate capital for the purchase of a sewing machine, or preferably, to move from production to cloth retailing. It is difficult to identify one critical variable in the capital accumulation process, with that phenomenon seeming to fall at the nexus of a variety of social resources. An important part is played by personal relationships between owners of machines or other important resources (capital, a rentable shack) and tailors who seek access to such resources. Exploitation can also arise from this close relationship with the machine-owner sometimes taking advantage of the machine-renter, who has little other access to the tools of production.

Tailors face many obstacles in the successful completion of the capital accumulation process, but the most important among them would appear to be the very "ease of entry" into the trade which makes it so appealing to many seeking urban work. The tailor tries to accumulate capital slowly while renting a sewing machine, hoping to be able to

start his own business. His attempts may be undermined, however, by the existence of increasing numbers of young, unemployed men on the urban margins - recent migrants or school leavers - who are willing to accept often part-time wage employment in tailoring while waiting for a better positio to appear.

Apprenticeship in tailoring was, until recently, the "waiting room" of the trade, where a boy learned the skill while waiting for a chance to work on his own. Apprenticeship has all but disappeared in the trade today as opportunities that do exist become more and more parts of a division of labor. A boy will be hired to sew pockets or hems rather than an entire garment, in the new jahiz or "ready-made" phenomenon in tailoring.

Ready-made production of clothing is rapidly changing the tailoring trade. At its most basic level, a small increment of capital allows an entrepreneur to rent a machine in addition to the one he rents or owns, and hire someone to do piece work on the other machine, complementing his own production. Larger amounts of capital permit the entrepreneur to acquire more machines and hire more workers, generally switching from rental to ownership as conditions permit. The largest number of machines seen in any one shop during this research was five.

The "mass production" of clothing is very much in its incipient stages in greater Khartoum and is the result of producers' attempts to cut costs and improve efficiency in

production. Ready-made tailors are producing low-quality and inexpensive street clothing and undergarments for middle and low income urban consumers. Made-to-order gelabiyas, dresses, and shirts are still basic to the wardrobes of most Sudanese and are not available from ready-made producers, but the mechanisms for encouraging that kind of production are certainly present in the society. We may speculate that a refinement of skills at the mass production level and an improvement in the availability of good quality cloth would eliminate most of the need for made-to-order tailoring.

At the social level, the newcomers to the tailoring trade who accept the piece work associated with ready-made production are entering the trade at a time when it offers few opportunities for independent entrepreneurship. As these young men are also not serving apprenticeships - learning the trade instead through quick "on-the-job" training - they are not exposed to the independent entrepreneurship experience as their predecessors were.

Case Study II: Carpentry

Rising incomes and a growing population have sparked a rapid increase in the number of men working in the carpentry trade in the Three Towns. The increased demand for furniture and residential housing has encouraged the development of new laboring positions in the trade with an emphasis on wage and wage-like employment, rather than independent entrepreneurship. Rapid changes in petty production have

increased the linkages between small carpentry firms as well, with sub-contracting of parts of projects promoting vertical integration of the trade.

I identified three major levels in the carpentry trade, based on income, location, products, and access to advanced equipment. Petty carpentry spans the continuum of productive relations, blurring, at some levels, the distinctions between self-employment and employment for wages. The carpenters at the lowest production levels frequently shift into wage employment on a temporary basis with the middle-level workshops, searching for security and earning the capital required to return to their independent production for brief periods. The middle-level producers, in turn, also engage in a form of wage-work, signing on as contract labor with the larger firms' construction projects. Their specialized skills make them invaluable to the housing construction industry. These middle-level producers are also dependent on the larger workshops for the use of advanced equipment, turning some of the middle-level producers into furniture finishers rather than complete producers. This dependence is such a common practice among the levels of urban carpentry that we may identify it as an important trend in the trade. Another important and related trend is the increasing involvement of non-property owning labor in carpentry, developing quickly as a change in the structure of production.

The monopolization of resources at the upper reaches of

petty commodity producing carpentry has allowed these producers to integrate more components of production. Ready-made furniture is becoming a familiar sight in the Three Towns, displayed in "showrooms," a few of which are owned by furniture makers themselves. The more successful producers are able to integrate the production and "mass-retailing" dimensions of the trade.

Carpentry has always had a strong apprentice training component, and the evidence reported in this study confirms the viability of the institution as an inexpensive and community-centered way to train labor even under difficult economic circumstances.

A concern for apprenticeship gives us some idea of future directions in the trade. The increasing productivity of the larger petty carpentry workshops has, in the short-term, tended to limit skill acquisition to only portions of the production process as tasks to complete a project are divided among several workers. Apprentices as laborers produce furniture through repetitive steps without learning the entire production process. Such activity does not build the self-confidence needed for the difficult challenges of entrepreneurship, which appears to be a difficult goal to attain for most of today's apprentices. But there are opportunities for some apprentices to learn the use of advanced mechanical equipment in the larger shops, and, in the long-term, there will probably be an increase in demand for skills as product lines expand. The

time required in apprenticeship may be extended as a "waiting period" for those interested in pursuing more independent entrepreneurship.

A small but well-trained labor force is being created through carpentry apprenticeship and extends into the other manufacturing area of metalwork as well. The absorptive capacity of these trades should be of major concern as more and more youths pressure the urban economy for work. In terms of productivity in furniture manufacture and product quality it would be preferable for such youths to find work in larger firms than for all of them to attempt "independent entrepreneurship" such as the wood market carpenters described in Chapter V, the highly competitive, lower-end of the productive continuum. Steel (1979) makes a similar observation about the apprentices of Yaounde and Accra.

Case Study III: Metalworking

The small scale metalworking industry is at a point on the continuum of productive relations that requires relatively large amounts of capital and skilled labor, compared to other forms of manufacturing in the informal sector. The strongest metalworking firms are able to exploit the skills of those producers at the middle-level of production through the sub-contracting of their labor and the monopolization of other resources such as desirable Industrial Area space, which prevent the middle-level firms from expanding their production. These middle-level firms

appear to be independent producers, but their deep connections with the largest firms signal their role as well-paid wage labor. The wages in this industry are high because of the great demand for its skills, which have no counterpart in competing formal sector industry.

The small scale metalworking industry presents the clearest example of capital accumulation in the informal sector. There is no aversion to risk-taking here - the stereotype of the African businessman - as competing metalworkers create and market new products, investing their profits in further expansion. It is this expansion that provides sub-contracting opportunities for the labor of smaller firms, confirming the differentiation in the trade and creating an urban network of dependent relations among metalworkers. The only true independent production existing in this system is at the top of this new labor hierarchy. The subsistence-level petty commodity production found in tailoring and carpentry does not exist in metalwork; the equipment and skills required do not permit such solitary production.

The Informal Sector and Class

One may scour the informal sector/ petty commodity production literature and find little that informs a discussion of class in urban Africa. Generalized and conventional notions of "working class" do appear occasionally on both sides of the literature and the radical

perspective (Gerry, 1974, 1979) does briefly mention the potential for proletarianization of non-property owning informal sector workers. If class were an important issue in the "informal sector vs. petty commodity production debate" one might assume that the former would stratify the population on the basis of income and other descriptive categories, while the latter would be concerned with the subject's relation to capital and other means of production. It should also be kept in mind that the theorists of petty commodity production believe that this structure exists in order to supply cheap goods and services to the poorly-paid workers in capitalist industry. The "petty bourgeois mentality" of the more successful producers would assist in stemming class consciousness, in this view.

The continuing focus on the rise of new employment categories in Khartoum's informal sector in the three case studies presented in this research, may also provide some evidence for the urban class debate. In order to formulate an idea of class among petty producers it would probably be useful to first consider those on the margins of urban society, the truly poor who are not finding work in this sector. This growing population group, primarily rural migrants and refugees or even some urban school leavers, is beyond the scope of this study. But acknowledging their existence does place our discussion in a more accurate context. A small part of this group on the margins, of course, does exert pressure on producers at the lower end of

the continuum of productive relations, in jahiz tailoring, for example. Some of these people are brought in at low wages to participate in the production of cheap, "mass-produced" clothing.

It has been generally noted that worker attitudes about "class consciousness" are difficult to survey cross-culturally. But I was able to observe general attitudes and behaviors which might provide possibly contradictory clues as to the direction of class formation.

The over-crowded nature of petty commodity production in the Three Towns creates strong competition among producers, which while ensuring the producers' awareness of their status in relation to other groups in Sudanese society, such as factory workers or owners, government workers, the urban jobless, or the rural poor, tends to discourage the development of class consciousness in the Marxist sense. Also, the trades are scattered throughout the area - some located in markets, others in neighborhoods - and they have few opportunities to come together as groups of tradesmen. There is no single political affiliation that unites them, although many are followers of modern political manifestations of 19th century religious organizations, such as the Ansar of the Mahdi. The Mahdi's grand nephew is the present Prime Minister, but greater working class solidarity is not on his political agenda.

One may observe the absence of strong cooperative work efforts in the market areas where petty producers are highly

concentrated. For example, during the frequent power failures, those who can afford the cost of gasoline-powered mini-generators will have their shops brightly lit while neighboring producers abandon work due to the darkness. One might think that joint investment in larger generators would provide more electricity more efficiently, but again, the extreme competitiveness of the petty economy works against such cooperation.

The sheer frustration of continued deprivation, lack of access to capital, and the difficulty of entrepreneurship in Sudan, strengthens individual producers' awareness of their social situation and is having some effect on changing attitudes. Among machine-renting tailors, for example, most express disgust with government corruption and its lack of action on their behalf. The tailors also express an awareness of who is "pulling the strings" in the society and that that force influenced the decision to push them to less desirable commercial locations. Many tailors defy the government ban against working on market "verandas" and the individual actions of these tailors are very obvious to other members of the group, all of whom need space in which to offer their service.

Among middle and lower level carpenters and metalworkers there are also some joint actions which may be noted. In Chapter V I described a group of Suq Sha'abi carpenters who sent a delegation to the local government office in order to demand the construction of toilet

facilities. These producers have also ignored the government ban on working outside of their shops, despite armed police attempts to force them into their hot, cramped shacks. They also frequently voice the opinion that it is they, the working class, who are propping up a badly managed national economy through their hard work, their taxes, and their employment of disadvantaged youths.

I can only speculate that these attitudes and behaviors, if developed further in this direction by a deteriorating economy, could promote further class consciousness among small producers. However, the Sudanese economy is performing miserably at present, with petty production one of its few successful areas. There is also the important social context of Islam, which does not recognize class distinctions and encourages a spirit of sharing among the believers.

Policy Implications and Directions for Future Research

From the earliest days of its "discovery," the urban informal sector has been a focus of interest for policy makers concerned with employment and economic growth in Third World cities. In some respects, questions of appropriate policy toward small scale industries in the informal sector raise issues of power and control: How can the people who have contributed so much to the development of the city's economy have a more significant role in decision-making in that economy? Any policies that are

established for the dynamic sector of Khartoum's economy described in this study, should be created in consultation with the petty entrepreneurs and workers. They have voiced strong opinions about their work, their problems, and the dominant forces in their lives. They may also be the source of solutions for these pressing problems.

A major finding of this study was the extreme heterogeneity that exists in the informal sector of urban Sudan. The policy implications of this finding are important: any massive intervention into this sector in hopes of improving productivity and increasing employment will have a differential impact on the diverse groups working in the sector. Gerry (1979) is concerned that policy makers learn who actually controls production before initiating reform, such as improving access to credit. Otherwise, the reform will serve merely as a palliative and not eliminate inequality. Kannappan (1985) adds that advantages already held by certain producers should not be further subsidized by government policy, increasing the oppression of those not so subsidized. It would seem that even assisting at the level of the lowest common denominator among petty producers, such as by upgrading facilities in poor market areas, would benefit the major producers through the improvement of their sub-contracted labor's performance. A strengthened and expanded set of workshops at the top of the labor hierarchy could result in the further proletarianization of the workforce and in a further decline

in independent entrepreneurship. With these caveats in mind it is difficult for me to propose the conventional government interventions for Sudan's informal sector, such as tax incentives, lowering of customs duties on imported equipment, or protecting "infant industries" with tariffs.

There are, nevertheless, a number of policy areas which seem to have potential for stimulating equity and which probably should be investigated. Producer cooperatives for the trades is an idea that has had uneven success throughout the Third World, but has not yet been developed for these trades in urban Sudan. We did see some potential for cooperative development in the case studies, such as with joint purchasing of materials and pooling of equipment and space. But urban life often works against such cooperation, severe competition all ready having been established as part of the system. Also, the issue of who would control collective capital would be difficult among tradesmen who have experienced the struggle of gaining access to any capital. These producers have concentrated on individual strategies; it would be a challenge to think about cooperative production.

The world's experience has shown that cooperatives are not successful when they are externally organized or imposed on producers. Should this approach be adopted for Khartoum's small scale industries, it would be best to build on what all ready is taking place cooperatively among the workshops: the sharing of tools and space that was described in the

carpentry and metalwork studies.

A second policy suggestion centers on Sudan's dominant economic sector: agriculture. Any policies that are promoted for urban small scale industries should not be at the expense of Sudan's all ready crippled agricultural sector. A policy which may address the needs of both sectors would be to encourage the development of small scale industries outside of Khartoum. All of Sudan's large towns are centers of agricultural regions. An increase in metalworkers in the Eastern town of Kassala, for example, could improve the access of farmers to agricultural implements and repairs for such tools. Such a policy may also work against rural-urban migration. The improvement of transportation in Sudan in recent years, particularly the paving of roads between Khartoum and Kosti on the White Nile, and Khartoum and El Gedaref, Kassala and Port Sudan in the East, has made it possible to supply these areas more easily.

A third policy suggestion concerns restoring the integrity of the apprentice training system. The upgrading of facilities for acquiring skills is essential if Sudan is to provide a productive future for its youths. Apprenticeship can provide labor power with appropriate skills cheaply and efficiently. Most importantly, the apprenticeship system allows a small community to retain control over training, not relying on formal, government institutions to provide skills that may not meet the community's standards or needs. At the time of this

research, the Governor of Khartoum Province, in a speech in Omdurman's Industrial Area, spoke of requiring all carpentry and metal workshops to take on at least two youths for the purpose of apprentice training, rather than as wage labor. The apprenticeship system is an exciting and under-investigated avenue of research. A focus on youth in the development process, through apprenticeship, seems a logical complement to the concern for women in development, and would lend a future orientation to development studies. In that regard, another useful direction for research would be to explore more thoroughly the income-generating role of the women hemmers described in the tailoring study.

When recommending policies for the informal sector it is important to consider the achievements that petty producers have made to this point totally without government support, and despite government harassment in some cases. The producers in this sector have largely been untouched by government loans or technical assistance. The relationship between petty commodity production and the state has been negative. The state has not recognized the viability of petty commodity production, continuing to foster an ideological commitment to "massive large scale industrialization." Changing the state's perception of petty production and gaining the trust of the producers should be a government priority.

The petty commodity producers have demonstrated that they are hard working and determined to fight a stagnant

economy on their own. Their market areas are the busiest centers of activity in the Three Towns, centers for highly motivated workers. The producers have engaged in active strategies to gain control over their economic fates. Those strategies should be acknowledged by planners and scholars who are building a case for the role of the small scale social system in the wider society's development process. Many producers have demonstrated their "credit-worthiness" through such active strategies, and yet they are unable to gain access to capital in order to expand their production.

In small scale industries we see people participating in the development process, not simply responding to an intervention promoted by an outside agency. The producers control - to the best of their ability - the basic decisions which effect their businesses. This control could be broadened to permit the producers greater responsibility for the community in which they work. Such control would include appointing and supporting their own leadership and having that leadership recognized by the state. The full economic and political participation of dynamic producers such as those described in this study, is the best step toward national self-reliance in a peripheral state of the world economy.

APPENDIX

The following are the two interview schedules - paraphrased in English - administered to entrepreneurs and apprentices. Survey was conducted with respondents in Arabic in their places of work.

Khartoum University
Institute of African and Asian Studies
Survey of Small-scale Industries and Skill-training in
Khartoum and Omdurman

I. Entrepreneur

1. Where are you originally from?
2. How long have you lived in the Khartoum area?
3. What kind of education have you had?
4. What kind of training have you had for your present work?
5. If you served an apprenticeship in this trade, how long was that experience?
6. Were you apprenticed to a relative?
7. What work have you done in the past in addition to your present trade?
8. How many years have you worked in your present trade?
9. How long have you worked in this location?
10. What was your father's occupation?
11. How old are you?
12. Do you make goods only for individual customers or do you do ready-made work? If you do both, which is greater part of your work?
13. Are you present in the workshop throughout the working hours or only part-time?
14. Do you or your workers ever take work in this trade outside of the shop?
15. Do you have any other sources of income? If yes, what is it?
16. Do you own this shop or are you renting space?
17. Is the owner another craftsman or a merchant of some type?
18. What is your monthly rent (if renting)?
19. Do you own or rent the tools and machinery?
20. How much, approximately, did it cost you to get started in this shop?
21. How much money do you make each week after expenses?
22. Do you ever take loans for your business?
23. What general problems do you face in your work?
24. If your business improved, what would you do with the higher income?
25. How many skilled people work for/with you in this shop?
26. How many apprentices?
27. Are any of your apprentices related to you?
28. How long does it usually take to train an apprentice in this trade?

29. At the end of his apprenticeship, do you help the apprentice to get started in the trade?
30. Do you require any special qualifications from a boy before you take him on as an apprentice?
31. How do you pay your skilled workers?
32. Do apprentices always complete their training with you?
33. If not, why not?
34. Could you employ more workers in this shop? How many?
35. What assistance from the government could be useful to you?

II. Apprentice

1. How old are you?
2. How many years of schooling have you had?
3. Why did you leave school?
4. Where are you from?
5. If you are not from Khartoum, why did you come to the city?
6. What is your father's occupation?
7. What work have you done before this apprenticeship?
8. How long did you seek an apprenticeship before finding this one?
9. How long have you been an apprentice?
10. Have you taken any special training in this trade outside of the workshop?
11. How long was that training experience?
12. Why did you choose this trade?
13. Are you now going to school or taking training outside of the shop?
14. Do you have any work outside of the shop? What is it?
15. Do you own any of the tools that you use in your work?
16. What will you do when your apprenticeship is completed?
17. What do you need in order to get a good start in this trade?
18. Do you think, in general, that it is better to work on your own account or for another man?

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