Culture, Class, and Development in Pakistan

The Emergence of an Industrial Bourgeoisie in Punjab

Anita M. Weiss

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میں چمن میں کیا گیا گویا دبستان کھل گیا
بلبلیں سن کر مرے نالے غزل خواں ہو گئیں

My wailings in the garden had
taught nightingales my tunes, behold!
They sing my ghazals sweet and sad
And do my manuscript unfold!

-- Mirza Ghalib

This book is the result of two major concerns in my life: my love of the South Asian subcontinent and my desire to understand the social processes that a culture undergoes due to the effects of industrialization. I hope that I have been able to give the reader a sense of today's Pakistan, of the ways in which its culture is being both reconciled and transformed because of the exigencies of development, and of the actors who have been at the forefront of these changes.

I am very grateful to the many friends, colleagues, and institutions who supported me at various stages in my study of Pakistan. To begin with, I would like to thank the Berkeley Urdu Language Programme in Pakistan for providing me my first access to Lahore, a city I fell in love with, and for letting me polish my Urdu language capabilities during the winter of 1978. I am grateful to the American Institute of Pakistan Studies, which funded my fieldwork in Punjab during 1979-80. After returning to the University of California at Berkeley, the Center for South & Southeast Asia Studies, the Sociology Department, and the Center for Middle Eastern Studies each gave me the opportunity to teach courses in my fields of interests on South Asia and the Middle East; I am unable to adequately express how much encouragement these experiences have given me in my work.

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My father, Sidney Walter Weiss, encouraged me in all of my undertakings and strongly believed in me. I dedicate this work to his memory.

Anita M. Weiss
Eugene, Oregon

1

Introduction: Industrial Development and Social Change

This study is concerned with social change in Pakistan, particularly the relationship between indigenous sociocultural orientations, the development process, and the rise of a new middle-level entrepreneurial class in the Punjab. My purpose here is to understand the growth of this class, especially the factors which have influenced individuals' decisions to depart from their previous lifestyles and enter into modern forms of industry. How cultural factors interact with political and economic circumstances--both domestic and international--in specific instances are a large part of the development challenges continuing to confront Pakistan today.

In the absence of an historical indigenous Muslim entrepreneurial class, several different types of industrial organization emerged in Pakistan following Partition. Industrial entrepreneurs who began factories in the Punjab came from diverse backgrounds and held different orientations towards modern forms of factory organization. How and why these men moved into industry--the motivations, hindrances and encouragements which affected them--are a major focus of this book as we look at the social transformations which take place in the process of industrialization in a capitalist framework.

The emergence of this middle-level class has been a decisive factor in socioeconomic change throughout the country. Interviews with Punjabi industrial leaders and case studies of three industries--pharmaceuticals, steel re-rolling, and sporting goods manufacturing-inform us about the development and impact of this new class in Pakistan.[1] Each of the three industries epitomizes a different pattern of development in the Punjab following Partition: import-substitution, basic manufacturing, and export-oriented manufacturing. Some actors were not obliged by their social logic or by other forces to revolutionize their modes of production, while others were. There is a point where politics, economics, historical experiences, and cul-

tural orientations intersect in influencing social logic and social action: this study questions how these factors combined in influencing the emergence of this indigenous bourgeoisie in the Punjab.

Prior to the growth of this class, there had been insignificant change in the traditional economic sectors of the country. The two dominant economic groups had been the *zamindars* [large rural landowners] in Punjab and Sind, and the urban industrial elites headquartered largely in Karachi. Zamindars continue to exercise significant influence in rural areas and provincial politics, although those who have not diversified into other areas of production have witnessed a decreasing power base in the past quarter century. The urban industrial elite are a product of a unique historical experience, and in the past were commonly referred to as the "Twenty-two Families".[2] Their wealth, intrinsically tied to the international capitalist system, enables them to wield controlling influence in banking, insurance and nation-wide corporations. The industrial expansion they promoted resulted in wealth and prosperity for only a very insular group; there has been little "trickle down" effect on the rest of society for this expansion occurred in virtual cultural and economic isolation from the majority of the Pakistani people.

However, the industrial expansion of the Punjabi class under analysis here has developed hand-in-hand with other sociocultural changes. Therefore, it is this new middle-level entrepreneurial class which is playing the dynamic role of innovator, converting the traditional workplace into a modern one with similarities to workplaces the world over.

Before a discussion of social change is possible, it is necessary to examine the traditional basis of social life in the Punjab as well as the economic parallels which form the more immediate context of the rise of a new middle-level bourgeois class. Colonial policies, while strongly affecting land tenure arrangements, tended to have minimal impact on traditional ways and values. The following chapter, therefore, frames the cultural context of the social history of the Punjabi people. It traces the pre-independence roots of industry including the limited industrial activity which occurred under the auspices of the British in the Punjab. In highlighting those aspects of tradition that expose the essence and temper of the population, we can see how cultural orientations create both obstacles and opportunities in the rise of this new class. It follows with a discussion of the general economic and political trends in Pakistan since 1947 with a focus on how these have affected social transformation. We proceed to the point at which the Zia ul-Haq government officially ended martial law on December 31, 1985. While the details of the

political and economic circumstances in Pakistan following the victory of the Pakistan People's Party in the November 1988 elections are beyond the scope of this book, nonetheless the issues intrinsic to the interaction between "culture and development" continue to be seminal to understanding Pakistan's development experience and prospects.

Chapters Three, Four and Five contain the heart of this work, based on extensive investigations of over fifty companies in the three industrial contexts under consideration. These case studies focus on the concerns and initiatives which led these new entrepreneurs to enter into their fields. Central also are analyses of the political environments within which each industry functioned, clarification of the Punjabi development experience, as well as the particular development pattern of each industry. Five general questions are considered:

(1) Who became involved in industry in the Punjab; why they did so; and how they were able to succeed (or not).

(2) The effects of culture on economic behavior, and the corollary question of how economic change affects culture.

(3) The relationship between economic development and political structures in an Islamic state.

(4) The ensuing changes that have come about in the fabric of Pakistani society, particularly the ways in which values and customs have become transformed due to industrialization.

(5) The nature of industrial development in Pakistan, including the role played by the government, foreign capital, etc., in laying the foundation for these transformations.

The final chapter places the rise of this new middle-level entrepreneurial class in an international context, drawing relations with experiences in other Third World countries.[3]

Economic Transformation, Social Action, and Development

Muslim states in particular are undergoing extensive crises over issues concerning development, industrialization and tradition. Discourse has especially been drawn on the relationship between Islam and capitalism, socialism and the republican state.[4] This study of Pakistan attempts to understand the dynamics of economic transformation in a postcolonial Islamic state within the limits of the indigenous culture. It focuses on changes which industrialization causes in peoples' lives. We are ultimately left with the question of whether there is an international culture which develops similarly throughout the Third World regardless of tradition and regardless of religion. That is, is there such a thing as "modern industrial" culture?

Industrialization and social permutations accompanying it had been the result of very gradual transitions in Europe. The foundations of contemporary western sociopolitical life developed slowly but concomitantly with industrial expansion. New classes emerged as societies changed in response to economic and demographic transformations (Marx, 1905; Weber, 1958; Moore, 1966; Hobsbawm, 1968). Myrdal (1968) argues that change was not rapid in the West prior to the industrial revolution and that we must recognize the importance of gradualness in the early development of the western countries. Traditional authority came to lose its sanctity, monarchies declined, and the hierarchical social order was disrupted, replaced by a division of labor determined by the ascendant capitalist mode of production. In comparing the development of the West with that of colonized states, Frantz Fanon (1965:41) wrote that changes in Europe proceeded slowly, and that:

> Western Europe had several centuries in which to become accustomed to, and prepared for, change. So the ideas of change, adaptability and mobility were gradually accepted as a way of life, until Westerners became accustomed to the kind of "permanent industrial revolution" in which they live today.

Colonialism played a provocative role in this process as external market surpluses were exploited for domestic benefit. Immanuel Wallerstein (1974; 1980) has shown that while the process of the emergence of the modern world system began with the onset of the era of mercantile capitalism, it rapidly expanded under colonialism. In turn, colonized areas experienced significant change and were

"underdeveloped," i.e., experienced structurally limited development.

Strong indigenous social classes emerged in the colonies which primarily served the economic and administrative needs of the colonizers. In doing so, they incorporated certain characteristics of their colonial rulers into their lifestyles, e.g., western dress, European languages and different orientations towards production relations.[5] Griffin (1972:38) argues that:

> Underdeveloped countries . . . are a product of historical forces especially those released by European expansion and world ascendancy. . . . Europe did not "discover" the underdeveloped countries; on the contrary, she created them.

Institutions in British India can be seen as examples of this process: the rail system, which connected those cities which the British rulers alone chose; the civil service bureaucracy, which prepared local elites to serve the British, but did not encourage participatory democracy or self-governance; and business, which emphasized the export of raw materials to Britain and other metropolitan areas. In the fertile Punjab, the British impact is often viewed as an increased impoverishment of the rural areas (Darling, 1928) due to the rise of money-lending to pay taxes and the increased power of the British-appointed collectors. Khalid bin Sayeed (1980:7) observes that:

> The British must have been aware that the only justification for the kind of socially inequitable system that they had created in the rural areas was the furtherance of their own interests through a system of indirect rule resting on the semifeudal dominance of the landlords and the pirs . . . the Land Alienation Act of 1900, ostensibly designed to protect the interests of all agriculturalists, turned out to be . . . a license for land grabbing on the part of the big landowners.

The creation of the canal colonies in western Punjab in effect facilitated the emergence of a rural-based elite class loyal to the British government which built the irrigation system and distributed lands.

In an ideal sense, the process of development involves changes in a society's basic institutions and social structure in such a way as

to reshuffle people into different social classes concomitant with an increase in the level of material consumption of much of the population. Gunnar Myrdal also sees development as implying a material betterment of the human condition and a deepening of the human potential, increasing access to many goods and services including higher literacy rates, better health care systems and freedom from poverty, famine and social injustice.[6] Development now also assumes the introduction of technology which transforms the existing industrial infrastructure and results in people performing tasks very different from those of the past.

Industrialization and development are not necessarily synonymous. Manufacturing industry is possible without widespread changes and social discontinuities resulting from its introduction, although it is generally characterized as such. Horowitz (1972:24) differentiates between industrialization and development in pointing out that:

> Development differs from industrialization in that the latter implies a series of technological, mechanical and engineering innovations in forms of social production. Social development for its part implies transformation in human relations, in the economic and political status in which men relate to each other, irrespective of the level of industrialization. Industrialization does produce stress and strain in human relationships which in turn has a large-scale effect on the overall process of social development. But to identify industrialization with development is to run the grave risk of offering prescriptions for economic growth independent of social requisites...
>
> Development implies a genuine break with tradition--perceptible disruptions of the "static equilibrium." Social development requires a new set of conceptual tools to explain "reality" whereas social change may leave intact old conceptual tools adapted to modified situations....

Development therefore implies not only a bettering of economic conditions and a more efficient mode of production, as does industrialization, but also includes changes which arise out of the social discontinuities introduced by the new forms of production. Mem-

bers of the federal Planning Commission (1988:35) in Pakistan have written that the ultimate aim of economic development is:

> to improve the well-being of society as a whole and to ensure that the benefits of economic progress are distributed fairly over the entire community. The alleviation of poverty, the provision of greater opportunities, the containment of excessively high incomes and the achievement of a more equitable distribution of income and wealth all contribute towards the attainment of economic justice.

A different ideological context comes to rule people's behavior, particularly in their orientations towards the family, gender relations and their local solidarities of necessities. While the basic logic of the capitalist system calls for the reinvestment of profits, the contradictory pressure by relatives, friends and other groups to convert profits into usable distributable income is substantial. In this process of development, the individual comes to assert his or her own interests against the interests of the community which, as we will see in the following chapter, may at times be at odds with certain values inherent within traditional Punjabi culture.

Though this transition from traditional to industrial society is unique in its specificity, general trends and movements can be analyzed comparatively. Tradition, the complex of historically derived ideas, values and forms which cultural action has taken, connotates prevailing social conditions independent of development. These include beliefs, values, laws, modes of activity, and customs. As tradition is lived out over time and people reconcile their actions, beliefs and values to necessary exigencies, this combines into the complex whole termed culture. Clifford Geertz (1973) explains that culture goes beyond the particulars which comprise it, becoming "the fabric of meaning in terms of which human beings interpret their experiences and guide their actions." Traditional culture, therefore, can be regarded as historically perceived social reality, prior to the onset of colonialism, industrialization, and development. The Planning Commission (1988:286) views culture as something which evolves, is commonly shared, lived by the people, and represents a total way of life.

Pahl (1984:54) argues that under conditions where development and/or underdevelopment occurs, the existence of confused and contradictory social relations generate "equally confused and contradictory attitudes to life and views of the world." The "fabric of

meaning" essentially becomes increasingly confused and problematic. Tradition per se must be partially destroyed because of its incompatibility with various aspects of modern production. But it is a double process: the partial destruction must be legitimized while the remaining vestiges are conserved and reinterpreted in an on-going process of modification and recombination. This integrative process is unable to maintain a traditional backdrop while restructuring various economic, political and social institutions in the face of foreign economic and cultural subordinating pressures.

The consequences of development, however, often include the disruption of the existing social structure without the creation of adequate alternatives as replacement. For example, Veltmeyer (1983) observes that the nature of peripheral underdevelopment in Latin America is due to the persistence of precapitalist relations, to surplus labor in the tertiary sector, a proliferation of petty production, and "active semiproletarianization".[7] We find that as the economies of such states are embedded in the existent capitalist world system, many forms of production exist which are more akin to those of the European protoindustrial period of the sixteenth and seventeenth centuries--considering their economies of scale--than with forms now prevalent in the advanced industrialized areas of the world.[8] The European phase of protoindustrialization, as Kriedte et al. (1981) argue, should more properly be seen as a second phase in the European transformation from feudalism to capitalism. Industrialization in many parts of the Third World may have similar forms and functions, though its life-cycle is rapidly speeded up due to the reality of international economic conditions. Third World businessmen, therefore, find themselves entrenched within a capitalist world system but generally not at the level of social organization and obligations at which western-based corporations are based. Expanding a national economy, however, is but one of the challenges of development: doing so in a way in which people retain meaning and social identity--their unifying moral vocabulary--is even more difficult.[9] Countries such as Pakistan must compete with advanced industrial states in a competitive international economic climate while searching for ways to retain their sociocultural identity and a sense of moral cohesion.

Regardless of political ideology adopted, the inequities and distribution of resources and opportunities in states such as Pakistan remain problematic. Stratification systems have been strongly influenced by the former colonialists who initially created an indigenous upper class subservient to the foreign, colonizing elite.[10] The present elite structures, usually operating within parameters along class-

based lines, tend to orient their movements to please either western governments, foreign transnational corporations, multilateral donors, the Soviet or Chinese governments or, as is becoming increasingly prevalent among the poorer Muslim countries, wealthy Middle Eastern states. While Third World states are demanding a greater share of the world's wealth (e.g., food-grains; control over communications; realistic export quotas) from the global system, major international lending institutions are simultaneously stressing that these states structurally adjust their economies, which inevitably has substantial social implications.[11]

The indigenous individual promoting this development is an entrepreneur. Classic studies on entrepreneurs have conceptualized these actors in three major ways: as innovator (Schumpeter, 1961); as coordinator of land, labor and capital (Walras, 1954); or as the one who commits the capital, bears the risk and makes the major decisions (Knight, 1921). Greenfield et al. (1979) place the activities of entrepreneurs in cultural contexts as they recognize the important influence which culture and social organization plays on entrepreneurial activity. Nofziger (1978), in his study on entrepreneurs in Visakhapatnam, India, expands on Knight's earlier theoretical contribution and identifies the entrepreneur, especially in peripheral societies, as the person with the largest initial capital share in an enterprise and/or the person with the principal responsibility for making the major capital decisions for the firm. Such actors comprise the class in the Punjab under analysis in this study.

The role played by the state in postcolonial societies vis-a-vis class actions is central and decisive, though at times appears vague and confused. The latter makes sense when placed in the context that classes are still in the process of being shaped, and that slight differences in the amount of power a class wields in the larger society at a given point in time can have significant ramifications on state actions. The economic interests of powerful classes are often both established and supported by the state. As in many other underdeveloped countries, Pakistan's economic history without the intercession of the state in the 1950s and 1960s--and certainly the emergence of the Punjabi entrepreneurial class under analysis here-would have been substantially different.

Important questions regarding industrial development in the postcolonial state remain. Is industrialization a cause or an effect of changes in the indigenous social structure? Why is it that some individuals choose to enter industry despite the presence of a political and social environment which often favors the rural landlord with wealth and social prestige? What are the conditions which make

seemingly average people suddenly stop doing things the way they used to, be it in farming or trading, and begin to re-invest their profits in developing such modern business institutions as banks or factories?

Abegglen (1959), Hirschmeier (1964) and Dore (1973) have attempted to answer these questions with reference to Japan's industrial experience. They and other writers on Japanese industrialization have noted that it was because Japan was basically removed from the development of the global economic system that it was able to transgress the limitations which that system imposed on other non-core areas. The Japanese people were able to transform some of their indigenous social institutions while simultaneously selectively adopting those western institutions deemed valuable for industrial growth.

As Pakistan's historical situation differs considerably from that of Japan, it is understandable how the two development experiences have been so dissimilar. While Brazil, Taiwan and South Korea have historically been placed in semiperipheral positions relatively similar to Pakistan's with respect to the world system, their experiences have also been vastly different from Pakistan's.[12] Therefore, we now turn to the particular elements involved in the development of industry in Pakistan to understand why this has occurred.

Pakistan's Experience

Underdevelopment in South Asia today is, to some extent, a continuation of the same fundamental processes of dependence which have historically existed under colonialism except that the actors involved in institutional transformations are no longer confined to the bureaucracy. As technological needs increase, dependence on international transfer of technology and capital becomes more decisive. Indigenous entrepreneurial classes are bound in their actions by the limitations imposed on them by both the external sources of capital and their own national governments eager to appease foreign benefactors. Industrial development occurs, but not outside of the parameters of the global economic system.

The fate of the large industrial families who gained prominence directly after Pakistan's independence was affected by a unique phenomenon whose basis can be found in the demand for Pakistan itself and the ensuing migration. The partition of the subcontinent caused an influx of merchants into Karachi from various parts of British India. These men--who Alavi (1986) refers to as the *salariat*--had money to invest and received an unusual boost from the gov-

ernment due to the exigencies of the new state, which Hanna Papanek (1972:5) sees as being related to "the existence of an economic vacuum".[13] However, industry in Karachi, based on import substitution and financial institutions, essentially grew up in a social void, engaging relatively few people from outlying areas in the running of factories and having little effect on Pakistan's social fabric. Industrialization was linked to the import process, replacing international consumer products with local ones, and did not shift the national economic mode of orientation.

In contrast to Karachi industry, which developed as essentially outward-looking, the basis of industry in Lahore has been that of an inward-looking manufacturing center receiving its impetus for growth in the mid-1950s and 1960s when American modernization theorists were stressing the development of local industries.[14] The men responsible for this growth in Lahore came from various backgrounds and orientations. Their industrial experiences are being replicated in other parts of Punjab as cities such as Gujranwala, Faisalabad and Wazirabad are following similar patterns. This indigenous Punjabi bourgeois class appears to be very influential in bringing new forms of business organization into peoples' lives and in actually transforming culture. These men have been the first ones who had to reconcile their traditional roles with the requirements of modern industry and capitalist production. They employ their workers on a smaller scale than do the Karachi elite, have daily interactions with them, and must now operate within newly stratified worker systems. The Urdu term *naukar* [servant or worker] is no longer appropriate when discussing the urban working classes in Pakistan because of the elaboration of these new systems of social relations. Where distinctions within the urban workforce were rare in the past, they have become abundant in the present.

This new bourgeoisie under analysis here is middle-level in the sense that its members are neither as wealthy nor have had as substantial access to political power as enjoyed by the Twenty-two Families and certain select Punjab-based business communities (e.g., the Noons; the Muratabalis). They tend to introduce more sophisticated types of machinery and western forms of social organization than do traditional traders/producers and must now be seen as a competitive force in Pakistan influencing many government policies and programs. For example, a member of this class discussed in Chapter Four, Mian Nawaz Sharif, became the Chief Minister of the Punjab province following the November 1988 elections.

Most important of all, this class appears to be ascendant throughout the country. The development this class has already ex-

perienced in the Punjab is now beginning to be seen in cities in other provinces such as Peshawar, Mardan, Quetta and Jamshoro. Therefore, an analysis of its growth, impact, composition and motivations may shed some light on the nature of class formation elsewhere in Pakistan, and the underdeveloped world in general.

This book examines the Pakistani industrial experience through the framework of the people who have played central roles in creating Horowitz's "genuine break with tradition," being both the instruments of this development and, in most cases, the beneficiaries of it. In the ensuing pages, it clarifies the forces which influenced particular persons from an apparently feudal/pre-industrial society to suddenly enter into capitalist entrepreneurship and attempt to compete against the seemingly strong corporate empires of the western world and Karachi. It cannot be said, as some writers on India suggest, that the old trading classes have simply become the new industrialists. If this were true, impoverished traders should have a better life, and there would not be such diverse backgrounds among the factory owners as there is. Thomas Timberg's (1978) analysis of the Marwari industrial community from Rajasthan shows that it is the transformation of traditional institutions which holds the answer to their economic success. In considering the relationship of the successful businessman/industrialist to the process of industrialization, he writes:

> We are thus led to re-examine the functions of traditional commercial and social values and institutions as they are used by trading communities in the transition to "modern" forms of economic activity. Perhaps it is the presence, rather than the absence of these institutions and values, which made the Marwaris and some other commercial institutions successful. It may be that many institutions, such as the joint family and strong, particularistic caste loyalties are the secret of success in Indian business and industry. For example, the retention of the joint family allegedly restrains entrepreneurs. The individual is constrained by the group and cannot move forward. On the other hand, there is some indication that a joint family may be a useful institution for mobilizing otherwise scarce factors, such as capital. (Timberg, 1978:16-17)

Many industrialists in Pakistan do come from trading communities or merchant *qaums* [tribes] whose members have traditionally been involved in non-agricultural activities, though this is more apparent in the Karachi business community than in Lahore. Cohesion among the Karachi-based industrial groups appears to have a basis similar to that of the Marwaris. Yet their relations with the workforce are also characteristic of western forms in that they rarely know their laborers and have limited interaction with their personal lives.

However, within the middle-level bourgeois class of Punjab, traditional ways of operation are more readily observed. Though change is apparent, there has not been a complete break with native life as in Karachi. An Urdu-speaking pharmaceutical factory owner's observations confirm this when he says:

> Our relationship with our workers is more like the landlords' relationship with the field workers. The big industries are different. For months the workers never get to see the face of their factory owner, and if a worker has any problem, he would never have the courage to go and face the big industry owner . . . because they would not be allowed to get to the owner even. But our workers are working with us all the time and can talk to us anytime they want to.

In an analysis of the development of indigenous entrepreneurs in the Punjab, a number of factors must be considered. The first general category is the struggle against tradition. It is important to consider that prior to independence, the area which is now Pakistan was not dominated by Muslim traders but by Hindu *banias* [traders] and Parsi (Zoroastrian) businessmen. In fact, not much industrial development had taken place in the area except for Karachi. Karachi has historically been a mercantile city, though it grew substantially during the British Raj as did other port cities in the subcontinent. Except for Karachi, there was little industrial enterprise aside from the provisioning of everyday necessities that exist in all agrarian societies. Britain's colonial policies brought about a condition of dependency by virtually destroying much of the indigenous industry so as to advance its own industrial development.[15]

The elite indigenous classes were aided in their acquisition of capital by their support for the British Raj yet they themselves had little power in decision-making. As will be discussed further in Chapter Two, many Muslims after 1857 felt themselves to be pari-

ahs in the eyes of the British after their defeat in the Rebellion. Indian Muslims, by and large, refused to participate in British institutions, would not attend their schools nor work for them. Many thought that the British tended to favor the Hindu community--whom the British felt they could trust more--while they sent Muslims and Sikhs abroad to police their empire.[16] By the turn of the century, however, salariat of both groups were disillusioned by the British and provided the main financial support for both the Congress movement and the Muslim League.

When independence came to the subcontinent in 1947, most of the industrial families in western Punjab (predominantly Hindus, Parsis and Sikhs) left for India, leaving Pakistan without an industrial elite. However, their bania traditions remained a part of the social fabric. When Muslim businessmen from divergent parts of India migrated to Pakistan, they brought with them customs based on different traditional relations, influenced by regional and religious motivations. A third "tradition" came to gain prominence as well, one brought by the foreign transnational corporations. This westernized perception of industry was technologically oriented, influenced by the forms in which business is conducted in the industrialized areas of the world and tied into the global capitalist system.

Each of these three cultural forms have been quite influential in Pakistan since independence. Understanding the transformations which industry in Pakistan has undergone in reconciling them enables us to arrive at an analysis of "industrial culture" in contemporary Pakistan and, more specifically, in the Punjab. We find that industrial culture, on the one hand, reflects traditional socioreligious values and yet, on the other, responds to the modernizing demands external to the society. Many questions arise in this context, including a consideration of the role which industrial development has played socially in Pakistan and the popular conception of industry. We also need to analyze the interactions and relations between classes involved in industry and the resultant interdependency to recognize both the culturally specific transformations which have been occurring and the politically determined ones.

In analyzing the ways in which business is conducted and the types of organizational structures which are prevalent, we question the extent to which there has been an adoption of the western tendency to regard business as society's pre-eminent institution. The Islamic view of business sees it as simply one factor among many in an individual's life, a distant second to religious virtue. The business one conducts is the means to one's livelihood and should be incorporated into the social system as a secondary element. However, as

Weber has argued (Turner, 1974:12), Islam has no ethic of asceticism: once religious obligations are fulfilled (e.g., giving *zakat* [alms]), there are no other restrictions on what an individual must do with his profits. While the secularized western world has established strong differentiations between the sacred and mundane spheres of life--the separate value spheres which are the legacy of the Protestant Ethic--the Muslim world sees little differentiation. Maxime Rodinson (1978) argues that though Islam has historically nurtured neither mercantile nor industrial capitalism, there is, however, nothing inherent in the religion which innately negates capitalist development. Islamic teachings uphold the concepts of private property and free trade, though prohibitions are imposed on risk-free interest; Islam is not necessarily an obstacle to the development of capitalist relations and institutions.[17] To understand the process of change, therefore, we must look at sociocultural factors which go beyond Islam, to the cultural roots of the actors involved in promoting change.

The second factor to be considered in an analysis of the growth of the middle-level industrial class in Punjab is its struggle against competition, an aspect which will only be briefly discussed in this book. Much has been written on the development and power of the Twenty-two Families, and it is not my purpose here to contribute to that discourse.[18] As stated earlier, the impact of this group on social change outside of its own circle has been minimal. Its style of organization cannot be referred to as ascendant; rather, it is coordinated mainly with export industries and banking. What is remarkable is that despite the power of the Karachi-based industrial groups and the foreign transnational corporations, this middle-level Punjabi class has been able to grow to a considerable extent nonetheless. This class blazed the path to follow for the rest of the country, while the "Karachiwallas" remain separate and unique.

Third, in an underdeveloped country such as Pakistan, it is crucial to analyze the role played by the state in the development of industry. Whenever it could, the government imposed import restrictions and enacted other policies which greatly affected the economic prospects of various groups. These actions must not be observed in isolation from political realities in the country nor from the historic relationship which has existed between the Pakistani state and western capitalist governments. Ayub Khan's motivation for developing the economy clearly complemented his political goals: to create a wealthy, indigenous class dependent on the whim of the state for its sustenance and well-being. Without state supports, the leading indigenous industrial communities could not have prospered as they

did. Perhaps the failure of Pakistan's industrial development, marked by the concern for political survival of regimes regardless of the well-being of the majority of the people, typifies the kind of social organization which has enabled the military, though enjoying little popular support, to repeatedly seize state power. Pakistan was to be (theoretically) the United State's "example to the world" of the type of development which could take place through infusions of large amounts of foreign aid and political infrastructural development.[19] However, neither of these policies met with success.

Research on Pakistan's development which has addressed the role of cultural orientations and economic activities has centered on the role of the Karachi elite and capital formation.[20] The impelling role of the remainder of the industrial community has been virtually ignored. Over a decade ago, Eric Gustafson (1976:210) noted that there had been little attempt to relate Pakistan's economy to the socioeconomic context from which it sprang and to see current policy problems as continuations of previous ones, and this remains true today.

Another neglected area is the change in social relations which results from new forms of industrial relations being introduced in the Punjab. In order to understand the nature of these changes, traditional Punjabi orientations especially towards kinship and the social construction of local solidarities must be taken into consideration.

Finally, there is the larger issue of the problematic effects of development. Although social change may be recognized as apparent and new classes--such as the middle-level bourgeoisie under analysis here--may enter the economic arena as serious actors, the profound and pervasive transformations effected by development may prove antithetical in the long run. In this book, we look at the actions of an emerging class and the interactions between that class and various economic, political and social forces. It is beyond the scope of this book to pursue the more philosophical issues pertaining to the social costs of development, to which Fernando Cardoso (1977) draws attention.

Whether the outcome of the development process will ultimately have more positive or negative effects on the lives of the Punjabi people remains problematic; it is for us, here, to chart out the course that process has taken.

Notes

1. See Appendix I for an elaboration of the methodology used in this research.

2. Hanna Papanek has written on the formation of the Karachi elite. In particular, see her "Pakistan's New Industrialists and Businessmen: Focus on the Memons" (1973) and "Pakistan's Big Businessmen: Muslim Separatism, Entrepreneurship and Partial Modernization" (1972).

3. The concept "Third World" is used in Horowitz's sense (as elaborated in *Three Worlds of Development*, 1972) for purposes of brevity. It does not include the advanced industrialized western capitalist nations of the First World (plus Japan and Australia) nor the Second World of the U.S.S.R. and its eastern bloc allies, but rather, it includes the remaining countries of Asia, Africa, the Middle East (excluding Israel) and Central and Latin America.

4. See for example, Rodinson (1978), Esposito (1980), Ruthven (1984), and Stoddard et al. (1981).

5. Powerful examples of this transformation and ensuing psychological effects include Frantz Fanon *Black Skins, White Masks* (Grove Press, 1968), Albert Memmi *The Colonizer and the Colonized* (Beacon Press, 1965) and Edward W. Said *Orientalism* (Vintage Books, 1979). A fictional account--but no less poignant--is by Chinua Achebe *Things Fall Apart* (Ballantine Books, 1959).

6. Myrdal (1968) elaborates on the absolute social benefits of development in *Asian Drama*.

7. As quoted in Walton, 1987: 104.

8. In the last decade, much research has been done on the proto-industrialization phase of European capitalist industrialization. For example, see Braudel, 1984; Kriedte et al., 1981; Tilly, 1983; and Wallerstein, 1974 & 1980.

9. The concept of a common moral vocabulary and its transmission through communities of memory is elaborated in Robert N. Bellah et al. *Habits of the Heart: Individualism and Commitment in American Society* (University of California Press, 1985).

10. See Frantz Fanon *A Dying Colonialism* (1965) and Edward Said *Orientalism* (1979) for elaborations on how the colonized internalized the structures imposed upon them by the colonizer.

11. A comprehensive account of some of these demands can be found in Lars Anell and Birgitta Nygren *The Developing Countries and the World Economic Order* (Methuen, 1980).

Structural adjustment has been stressed particularly in those economies with severe balance of payments deficits. There are always important underlying political implications to any action which a state takes to alleviate such problems.

12. There is a great deal of literature available on the development experience of Brazil and the East Asian newly industrialized countries. For example, refer to Evans, 1979; Cardoso and Faletto, 1979; Gold, 1986; and Jacobs, 1985.

13. Alavi (1986) provides an interesting analysis of the various groups involved in the demand for Pakistan, particularly the *salariat*. He divides the groups along the lines of ethnic, class and religious orientation.

14. In particular, I am referring to the works of Rostow (1962), Papanek (1962) and Huntington (1968).

15. How Britain underdeveloped South Asia is a topic which has been widely pursued. See for example, Bipan Chandra's essay "The Indian Capitalist Class and Imperialism before 1947" (1975) and D. R. Gadgil *Origins of the Modern Indian Business Class* (1959).

16. Punjabis were particularly favored to police Hong Kong and the Straits Settlements.

17. Weber only argued that its lack of an ascetic ethic was an obstacle to the *nascent* development of capitalism, not to its importation.

18. For an example of the different types of approaches taken in analyzing the power of the Twenty-two Families, see Hanna Papanek (1973); Rashid Amjad (1974) and Lawrence White (1974).

19. Gustav Papanek wrote about the economic prospects for Pakistan in *Pakistan's Development: Social Goals and Private Incentives* (Falcon & Papanek, 1971). Samuel Huntington praised Ayub Khan's efforts at political integration in his *Political Order in Changing Societies* (1968:251-55).

20. See also Hanna Papanek (1976) and Stephen R. Lewis & Ronald Soligo (1965) for further references. Recent work in this field published since the completion of the initial draft of this book includes S. J. Burki and Robert LaPorte (eds.) *Pakistan's Development Priorities: Choices for the Future* (1984); Stanley Kochanek *Interest Groups and Development: Business and Politics in Pakistan* (1983); and Zafar Altaf *Pakistani Entrepreneurs: their Development, Characteristics and Attitudes* (1983).

2

Socioeconomic Profile of the Punjab

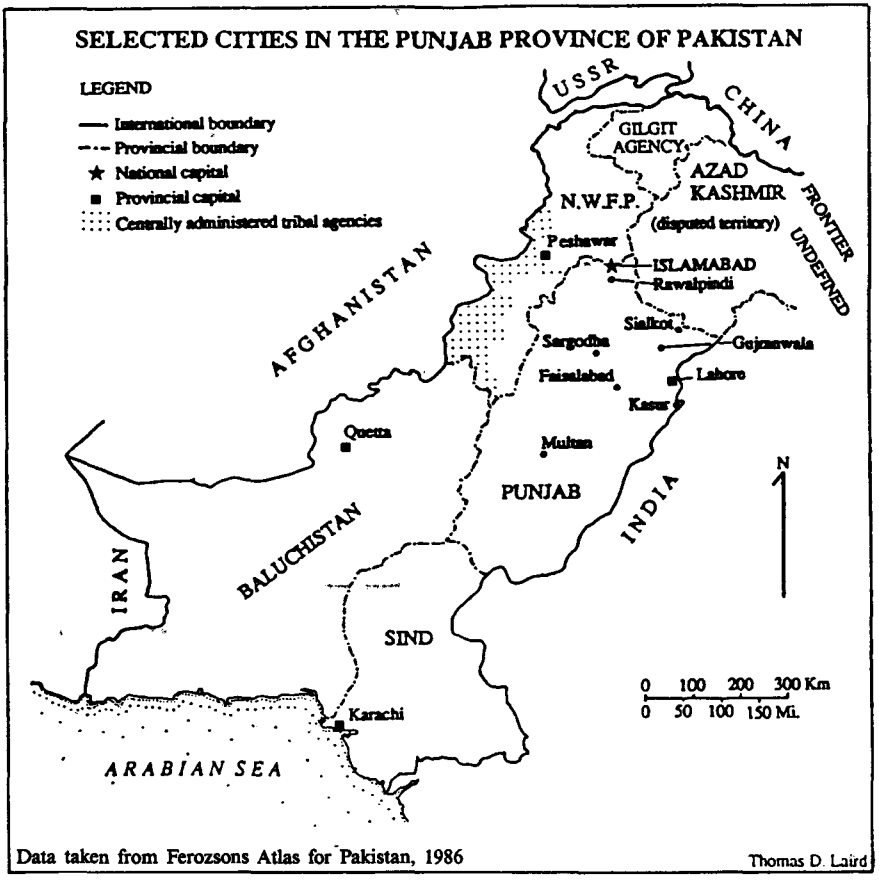
Spatial and Cultural Overview

The national entity, Pakistan, was born on August 14, 1947, as the envisioned homeland of South Asia's Muslims. Although never previously united as a separate nation-state, this area has a long heritage of civilization and empire, recorded since the days of Harappa and Mohenjo-Daro. These ancient cities as well as others including Taxila, Multan, Lahore, and Quetta provide a sense of historical nationhood, i.e., of being an historic entity, united by more than just religion.

The approximately three hundred thousand square miles which comprise Pakistan are inhabited by an estimated population of 107 million, of which approximately 28% live in urban areas. The 1981 Pakistan Census estimated that 26% of the general population (47% urban; 17% rural) is literate. Pakistan has the tenth largest population in the world, and doubles its population every 23 years (at a 3.1% rate of growth).[1]

Pakistan was initially divided into two large chunks at Independence which were separated by a thousand miles of Indian territory. The cohesiveness of the state was shattered when the eastern portion seceded in 1971 and became Bangladesh. In addition to the four provinces of Punjab, Sind, Baluchistan, and the Northwest Frontier which are divided roughly along linguistic lines, the federal government administers Azad Kashmir and tribal territories in the northwest of the country. Geopolitical issues are of particular importance to Pakistan as it is bordered on the west by Iran, northwest by Afghanistan, north by China, east by India, and on the southern section by the Arabian sea. Only a small strip of Afghan territory, less than thirty miles of mountainous terrain, separates Pakistan from Tadzhik province in the U.S.S.R.

At Partition, the western half of the country was divided into four regions based on dominant language categories. However, the national lingua franca was proclaimed to be Urdu, an amalgamation of Hindustani grammar and Persian script which the Mughuls had


SELECTED CITIES IN THE PUNJAB PROVINCE OF PAKISTAN
LEGEND
International boundary
Provincial boundary
National capital
Provincial capital
Centrally administered tribal agencies
USSR
CHINA
GILGIT AGENCY
AZAD KASHMIR
(disputed territory)
FRONTIER UNDEFINED
N.W.F.P.
Peshawar
ISLAMABAD
Rawalpindi
AFGHANISTAN
Sialkot
Sargodha
Gujranwala
Faisalabad
Lahore
Kasur
Quetta
Multan
PUNJAB
INDIA
N
IRAN
BALUCHISTAN
SIND
0 100 200 300 Km
0 50 100 150 Mi.
Karachi
ARABIAN SEA
Data taken from Ferozsons Atlas for Pakistan, 1986
Thomas D. Laird

adapted to their needs and which has become identified as the Muslim language of the subcontinent.

The easternmost province of Punjab in Pakistan was a small portion of the area historically considered the Punjab; the remainder of this area was ceded to India. In terms of physical characteristics of the Punjabi people, G.S. Chhabra (n.d.:21) writes that historically:

> The typical Punjabi was tall, spare but muscular, broad-shouldered, with full dark eyes and an ample beard. The hair was invariably black, but the complexion varied from a deep lime-brown to wheat colored.

Traditional dress for both men and women consists of the shalwar kameez, loose pants covered by a long tunic. Men commonly wear turbans on their heads when outdoors, while women cover their heads with their *dupatta* [diaphanous veil] in the home, and wear a *burqa* [fitted body-veil, often in two pieces] or *chador* [loose veil which drapes over the body] when they go out. While Islam enjoins a woman to cover her hair and "bodily ornaments",[2] South Asian Muslim women would customarily cover their face with the veil as well, so that they could not be recognized. Even today, a woman (except among the elite classes) rarely goes out alone with or without a veil (except among the most westernized classes), so that her virtue cannot be questioned. If a woman happens to come into contact with a male outside of her close circle of kin, she observes "eye purdah," looking down and away to avoid eye contact.

While the national language is Urdu, most Punjabis did not speak it--at least, not comfortably--prior to Partition. The majority of Punjabis still do not feel as comfortable with it as they do with their own language, Punjabi. The Punjabi of the Muslims is similar to the Punjabi of the Sikhs except that the former is written in the Persian script (as is Urdu) while the latter is written in Gurmukhi, a variation of Devanagri (the script of Sanskrit and Hindi). Punjabi has a literary heritage and is considered a "full-bodied" language which aptly reflects its peoples' orientations towards life. An appropriately vivid, colorful description is given in Prakash Tandon's *Punjabi Century* (1968:68-71) in his portrayal of Punjabi life:

> Punjabi is a quaint language, slow, indelicate and lusty. When the U.P. *babus* [Uttar Pradesh bureaucrats, working for the British] came with their refined speech and manners, we became acutely aware

> of our crude ways and indulged in self-depreciation, which however in Punjabi make-up goes hand in hand with boasting. . . .
>
> Punjabi excels in love and in abuse. Its abuse is of the geneological kind which can trace one's family history in the most revealing and incestuous terms . . . vivid in quarrel, Punjabi can equally convey its vigour in love, whether in the ballads, the improvisation of the peasant in the field or the women quarreling in the *muhallas* [neighborhoods], its purple passages are those tinged with the facts of life. They are earthy and direct.

Punjabi kinship takes three forms: biological, fictive, and symbolic. Within the family, there is an intensively doubled kinship: your brother is your friend; your friend is your brother; and both enjoy equal access to your resources. In a traditional context, there is virtually free access to your kinsman's resources without a foreseeable payback. This results in social networks which are not self-oriented but are instead based on local solidarities of necessity. These reproduce not only friendly relations but a local community structure. Therefore, there is a great deal of social pressure on an individual to share and pool resources (e.g., income, political influence, personal connections). In many ways, there is an incompatibility between the necessities of the capitalist system to pool resources for further profit, and the local solidarities of necessity which seek to extract these resources for the local structure and allocate them for reproducing non-economic relations.

Work is traditionally conducted for the collective benefit of all the household members. Prevailing social ideology continues to sustain this: in marriages arranged by elders, in securing admission to a particular school or employment, or acquiring political assistance, individuals must operate within or between close households.

Therefore, we can see the potential for the emergence of an important conflict within Punjabi kinship orientations when a Punjabi becomes a capitalist entrepreneur. This actor, who distributes wages and salaries, is in a crucial relationship with his workforce in modern capitalism. For the system to function, there can be no kinship constraints as decisions must be made on a rational basis. Capitalist conditions virtually demand that there can be no a priori social bondage between an owner and the workers. As the expansion of capitalism in Western Europe was accompanied by the breakdown

of traditional forms of the family (Shorter, 1977), so too do we see changes occurring in the physical forms of the family in the Punjab, especially in urban areas. What has not occurred, however, is a substantial change in the notion of kinship. Kinship obligations remain central to an individual's concerns. This is understandable in the context of the realities of Punjabi culture where jobs are acquired through kinship ties and everyone involved is well aware of the obligations which press on all participants.

Though the influence of Islam in the Punjab has been substantial for centuries, so too has that of Hinduism and Sikhism. While few members of the latter communities remain in the Punjab, elements of their cultural orientations remain influential, particularly in the realm of kinship. Nonetheless, cultural values stemming from religion are closely tied in with Islam. While Islam proclaims the equality of all men, it is translated into practice here by the stratification of Muslims into *qaums* [roughly translated as tribes] and classes. Stratification is not as pronounced among Muslims as it is among Hindus, although there are some qaums which have an historical identification with certain roles. For example, Mughals and Rajputs are associated with being political powers; Syeds and Qureshis as religious leaders; Bhattis, Sheikhs and Khojas as traders; and Arains, Gujjars and Jats as rural peasants. However, while qaum identity may have once conferred social or occupational status, it can no longer be viewed as a valuable concept in social differentiation. Qaum today is merely a social identity; it cannot be regarded in the same manner as the Hindu term *jati* [caste] which virtually assigns occupational and ritualistic identity as well. Class has overtaken qaum as the major stratification indicator.

While Muslim men are allowed by the Qur'an to have more than one wife (with the provision that they treat them equally), most Punjabi families are monogamous. Economic factors are an important consideration, not only for the number of wives a man may have, but also the number of progeny which will result from multiple marriages. Social constraints against polygyny also stem from the system of arranged marriages, which regards every marriage as an alliance between families and not simply a union of individuals. Patriarchal, patrilineal and patrilocal, the Punjabi family virtually revolves around its males, although the females are responsible for the internal tasks of the household such as food preparation and child rearing. In Punjabi villages, wherein live the overwhelming majority of the population, *purdah* [the seclusion of women] has not been traditionally practiced to the extent which is necessitated in urban areas. The women of the landlord's family would be confined to the

family's compound; other women traditionally participated in such tasks as cutting hay and planting rice in the fields. The agricultural lifestyle of the Punjabis has always included women as productive members, though this status has never applied to urban areas.

The restrictions of purdah, which has developed into a formalized separation of women from the world of men in South Asia (Papanek, 1973), have always been more strictly applied to urban than to rural women. Though purdah literally means "curtain" in Urdu, it has come to connote both the physical and abstract separations between the activities of men and those of women. For a woman to work outside the home meant that the men of the family were unable to provide for her. As the culture outside of the home revolved entirely around the actions of men, it was considered dishonorable and shameful for men to have "their women" work. Whether in rural or urban areas, the man's world has concerned external activities including providing food and shelter for his family, maintaining social relations within the community, and performing religious obligations in the mosque. In rural areas, women have been able to perform such functions as rice transplanting, cattle herding, and other tasks common to an agrarian subsistence economy. However, urban women were left without such options. They would spend their time with their children in the *zenana*, a separate section of the house where men would rarely enter.[3] Here, all the women in the family would live communally, stitching their clothes, preparing food, and tending the children. Generations of women would live together, including all the wives of each male family member. This practice remains common, especially among working class families.

Pre-Independence History

Invading empires have often found the area now Pakistan a fertile place in which to grow and thrive. First came the Indo-Aryan invasion, occurring some four and a half thousand years ago, which resulted in the imposition of the Aryan invaders' highly structured stratification system (later elaborated into the *varna* system) upon the conquered peoples. Alexander the Great later brought his troops to the borders of the area; Gandharan civilization came to thrive in the rough mountain areas of the Northwest Frontier.

The impact of Arab traders on converting the local population was minimal until Mahmud of Ghazni invaded from Afghanistan in 957 A.D. History from then on tells of different Muslim dynasties

vying for power throughout northern India, and the Punjab was often the battleground on which campaigns were waged.

The most notable of the various Muslim rulers were those of the Mughal Empire established by Babur in the early 16th century. Babur's descendants, particularly the emperors Akbar, Jehangir, and Shah Jehan, are known for having encouraged the establishment of Muslim social and economic institutions. Wondrous architectural masterpieces were built during the height of the Mughal era, ranging from the late 16th century through the mid-18th century. Memories of empire remain throughout the Punjab in the form of grandiose shrines in remote villages and small towns and *havelis* [joint family living quarters] and gardens in the large provincial cities which include Lahore, Sialkot and Multan.

The Sikh empire, particularly when led by Ranjit Singh from 1798-1839, challenged the hegemony of the Mughals in the Punjab throughout the 18th and early 19th centuries. Ornate *gurdwaras* [Sikh temples] remain in the Punjab along with countless *mandirs* [Hindu temples], testaments of the Punjab's diverse religious heritage.

Though the British initially gained entry into India via Calcutta and Bombay, they gradually made their way into the Punjab where they found the Muslim/Sikh/Hindu political rift quite substantial. Imran Ali (1988:5) suggests that the period of British rule in the Punjab was dominated by three major political themes: political entrenchment, revenue extraction, and military requirements. We can see these themes played out in the ways in which the British garnered support among the Punjabi elites by the establishment of a land-based taxation system and the construction of canals.

The taxation system granted a block of land to a local *tehsildar* (generally from a traditional elite background) who was responsible for a certain tax payment to the Raj for his area, a *tehsil*. Each tehsildar independently established and enforced his own taxation collection system. Whereas large landed estates were common in this area since the Mughal emperors rewarded faithful wartime companions with land grants, the system promoted under the Raj further accentuated the division between landed elites and the rural masses, as vividly described in Darling (1928).

The monetarization of the Punjabi economy through the new taxation system and Punjab's gradual incorporation into the global economic system had contributed to increasing levels of indebtedness among rural elites. The 1900 Punjab Alienation of Land Act attempted to placate these elites by forbidding the transference of land from "agricultural to nonagricultural castes" and by only allow-

ing land to be transferred within related agricultural caste groups in each district. The construction of nine canal colonization projects in the late 19th and early 20th centuries in western Punjab was a brilliant method in which the British cemented support for their rule among the rural elite classes. The creation of canal colonies and the concomitant promotion of agricultural activity strengthened elites' ties to the land at a time when such ties were wavering elsewhere in the subcontinent.[4] Few Muslims among the Punjabi agrarian elite supported the secessionist ideas of the Muslim League; instead, many were strong supporters of the loyalist Unionist Party. Ali argues that the outcome of the agricultural colonization in western Punjab was a political culture of those with land--particularly irrigated land--who had access to the reins of power, especially among Muslims. He writes that:

> The dominant peasantry which the state had entrenched with land grants was quite capable of prospering through commercial agriculture. To these ends it readily absorbed the new resources made available to the canal colonies, and undertook the difficult task of bringing barren wastes under the plough. But it also displayed an incapacity to make more fundamental sacrifices, and thereby contribute to economic "progress." The fact that administrative action could not be disentangled from the renewed tyranny, at every opportunity, of petty officialdom further compromised the prospects of agrarian innovation (Ali, 1988:67).

It was only the largest of the rural landlords who diversified their holdings into industrial capital ventures preceding or just following Independence. But these families were already members of the power elite: the Noons, Tiwanas, etc. They were the ones to whom the British had allocated large parcels of canal colony lands and who had historically exercised substantial political and social authority. To ensure that this authority would not dissipate (or else the British would not know to whom authority should be delegated within the native population), the British instituted schemes such as the Court of Wards to oversee the rural elites' financial affairs during times of strife or turmoil (Ali, 1988:84). Conversely, the encouragement of industrial activity in the Punjab was not high on the British agenda nor did a capitalist farming class emerge.

Industrialization in the area now constituting Pakistan, and particularly the Punjab, virtually began with Partition. The cities of Hoshiarpur, Jullunder, Gurdaspur, and Sialkot have been the historical heart of industrial Punjab: all but the latter city are in the eastern portion which was ceded to India in 1947. Although the British had built an important infrastructure of roads and railways in the Punjab beginning in 1862 with a road linking Lahore to Amritsar, the transport of goods from Karachi to the land-locked Punjab remained a difficulty.[5] By the turn of the century, nearly 60% of the Punjab's population remained engaged solely in agriculture; 20% were artisans; 4% were engaged in commerce; 3% were professionals; and 2% were government servants (Chhabra, n.d.: 41). Artisans were concerned with subsistence crafts, particularly with making pottery, *lungis* [cloth to wear around the waist], *dhurries* [bedding], *charpais* [wooden beds woven with either jute or leather], and *khes* [bed-sheets]. The simple industry and banking which existed in the province was run primarily by Hindus and Sikhs. Muslims here have historically invested only in agriculture and simple trading, often citing that *riba* [usury] is against the tenets of Islam. Smith (1947: 196) writes that, for this reason, the general perception at Partition regarding Pakistan's future was bleak, since there were no readily exploitable natural resources which could attract investors and:

> Muslims were thought to have little interest in, or appetite for, commerce or industry . . . the Muslims had always been the peasants and proletariat, while some of their landlords and all of their mill-owners had been Hindus.

This situation is especially obvious in the history of the Sialkot sporting goods industry: only after Partition and the exodus of Hindu and Sikh owners did Muslims begin to run their own industrial enterprises and adopt new forms of industrial organization and innovative technology.

Cotton constituted the greatest domestic industry in the Punjab during the British reign. *Khaddar*, Punjabi homespun cloth, was especially famous for its strong weave and beautiful colors. Muslins, khes, dhurries, lungis, and carpets were also woven out of cotton, occasionally even for export. There was a limited attempt to industrialize the cotton-weaving manufacture in Punjab, though the Census of 1901 records that only half of one per cent of workers in the cotton industry there were employed in factories.[6] Whatever textile fac-

tories did exist often failed due to poor loom construction and the use of nonstandard materials and practices which resulted in substandard products. The influx of European yarn, as well as superior yarns from Bombay, Calcutta and other areas within India, also hurt this industry and the Punjabi threads greatly depreciated in value.

The second largest industry in Punjab was wool, which centered around the manufacture of high quality shawls, *namdas* [sun-dryed unwoven rugs], and carpets. Other industries of note--but all conducted on a very limited basis, and primarily by Hindus and Sikhs--included silks, embroidery, and wood and leather manufacturing. Brass and copper goods, mainly in the form of utensils, were manufactured solely for domestic purposes and local consumption. Pottery and glass manufacturing barely filled local demands as there was a lack of quality material and furnaces.

In 1892, the British government decreed the Indian Factories Act protecting factory operators in the Punjab. The reporting provisions of the Act highlighted the limited degree of industrial development which had occurred. For example, only 152 factories were recorded as working wholly or partly by steam power in the entire Punjab in 1901 (Chhabra, n.d.: 199). Latifi (1911) enthusiastically chronicled the rise of ginning factories and tanneries which he likened to a miniature industrial revolution. Banks began investing heavily in the cotton industry. However, the initial profits in this field attracted many competitors to the point where so many gins were operating that the province's total crop could only keep them working for two months. The "wave of industrial and financial hope" broke: the major banks suspended payment, causing many local banks and industrial concerns to close down (Badenoch, 1917:6).

Forty-two registered factories operated in Lahore district in 1915. Eight of these were "crown" factories (i.e., owned by the British government), of which six were under the control of the railways. The private factories were mainly involved in cotton-ginning and the pressing and production of oil and flour. It was not until after 1947 that Lahore witnessed a transition when traditional industries based on subsistence consumption began to be replaced by more profitable, innovative ones involving more complex technology. The largest private factory in 1914 was the Lahore Spinning and Weaving mills at Shahdara, near the location of the burgeoning industrial area on Sheikhupura Road. Other factories of note were the Leather Tan Factory and the Punjab Oil and Flour Mills. There were no sugar mills, paper mills or distilleries in the district.

Instead of embarking on a path of industrial growth, the Punjab maintained its traditional system of villages as self-contained eco-

nomic units. Since all the villages' needs were supposedly provided for locally, there was scant incentive for manufacturing products in larger quantities for sale elsewhere. The only exception was the manufacture of luxury items, but even then the indigenous producers could not successfully compete with outside competition such as delicate cottons from Calcutta and silks from Banaras.

Industrial enterprise was not prevalent in this fertile province in large part because of its system of landholding. Artisans in a village, regardless of the success or failure of the year's agricultural crop, had always received their proportionate share whereas artisans in the city, dependent on cash payments for their labors, were not as secure. At times of great drought or flood, it was the latter group who suffered the most, as people simply did not purchase their goods. This proved to be a disincentive to anyone who thought of leaving the village and going to the city to do some business. Security remained in the village; the city was an unknown and potentially harsh place to survive.

Darling (1928:207) wrote that, paradoxically, the Punjab at the turn of the century was "agriculturally the most prosperous province in India, and it is probably also the most indebted." Because of the severity of widespread debt, artisans in the Punjab rarely tried to improve their efficiency or production since the resultant profits would merely go to paying their debt off. When an artisan left one employer for another, his indebtedness traveled with him as the new employer customarily refunded the debt to the former employer.

The system of agricultural landholding was but one problem which precluded the development of industry in the Punjab. The Muslim community faced additional obstacles including religious restrictions, relations with the British, and traditional occupations and literacy levels.

Religious values reinforced traditional occupations in two primary ways. First, Islam prohibits riba, interest gained through moneylending. The political culture of the area formerly under Mughal rule came to accept the enforcement of prohibitions against riba as well as other selected Islamic laws and prohibitions. The decline of the Mughal empire in the late 18th century and its ultimate overthrow by the British in 1857 brought about the incorporation of British civil codes into the prevailing legal system and, subsequently, significant changes in how business was conducted. Only in the area of family law were the separate religious communities able to maintain their traditional systems based on religious codes or laws.

The second way in which religion influenced industrial enterprise lies more in the realm of religious tradition than actual doctrine. Rural Muslim families in the Punjab historically have been close, tight-knit, interdependent units. First cousin marriages, particularly between brothers' children, have been strongly encouraged. Another common practice in the system of arranged marriages is that of "exchange" marriages, i.e., a man's sister marries his wife's brother. In both instances, while the family unit is strengthened, these types of marriages do not encourage separation from the unit. In the latter case, the enterprising man could be further discouraged from leaving his family and land for the city by his father-in-law's threat of his sister's return to her family, which would be a disgrace to both her and her family. The reason for this lies in the perception that the man's wife would suffer if forced to live in the city with her husband, or even if she had to stay in the village while her husband went to the city. This is because of the strict restriction regarding respectability and honor which apply to women and their actions.

The second obstacle to Muslim participation in business concerns the relations between the Muslim community and the British after 1857. Each eyed the other with distrust and contempt. While the degree to which the British Raj favored the Hindu community over the Muslim community is a hotly disputed point, the fact is that relatively few Muslims participated in such "modernizing institutions" as British schools, clerical employment under the Raj, and trading with the British army.

Traditional occupations and low literacy levels also played a significant part in limiting new career options for the Punjabi Muslim population. As noted earlier, Muslims were either involved in agriculture or as laborers working for others. Such occupations did not lend themselves easily to transformation under conditions of industrial capitalism. This, however, has political and cultural derivations though not religious ones. Islam is a literary religion: the most vital aspect of the religion is God's word as written down in the Qur'an. Gellner (1981) argues that the Qur'an plays a vital role as a social contract between groups. Therefore, every Muslim (including women) should at least be able to read the Qur'an. There is a commonly-quoted *hadith* of the Prophet that enjoins the believer to seek out knowledge "even if he has to journey to China" to do so.

Sir Sayyid Ahmad Khan observed the constraints under which the Muslim community was living in the latter part of the 19th century. He argued that Muslims were suffering because they had refused to participate in British institutions in India, particularly in education, as emancipation for Indian Muslims lay in their getting a

secular education, in addition to religious training. Social and educational reforms were imperative if Muslims hoped to ever achieve power in the larger economy and society. He subsequently organized a socio-educational revival movement, the Aligarh Movement.[7]

Many religious leaders, however, did not subscribe to the secularizing philosophies of the Aligarh movement and those of its political heir, the Muslim League. The most noted movement of this nature was that of the Deobandis.[8] Founded by Muhammad Qasim Nanawtawi in 1867 and noted for its orthodox theological scholarship, this religious institute became the antithesis of the Aligarh movement. It completely disassociated itself from Western education, specializing instead in Islamic traditional sciences. The movement's leaders, the *'ulema* [Muslim religious scholars], were politically hostile towards the British and purportedly supported the 1857 Rebellion. Most of the adherents of the Deoband school did not support the demand for a separate Muslim state, claiming that as Islam was an international religion, it cannot be said to be embodied in only one country.

From these two movements, Aligarh and Deoband, we can see the historical basis of the contemporary discourse concerning the degree to which Muslims should participate in western-derived secular institutions and transform their existing social institutions to be in conformity with the demands of the global economic and political systems.[9] At what point is there a role for Islam to play in economic institutions such as banking and manufacturing?

The Muslim League was initially composed of secularized entrepreneurs, often graduates of the Mohammadan Anglo-Oriental (M.A.O.) College at Aligarh. Only after its transformation into a mass-based movement in the 1940s was it able to serve as a unifying force for the majority of South Asian Muslims. However, the loyalist Unionist Party still enjoyed much popularity in western Punjab and there was a strong reluctance on the part of the Punjabi Muslim landed elite to unite with the non-Punjabi Muslim capitalist classes.

Mohammad Ali Jinnah, considered the Father of the country, came from an entrepreneurial family in Gujarat. Most historians contend that Jinnah did not intend to form a theocratic state nor did he envision the mass migration which occurred following partition of the subcontinent. Initially, he just wanted to safeguard Muslims' rights--especially regarding economic participation--in an independent India. Shahid Javed Burki (1988:7) argues that the creation of Pakistan was "a political solution to an economic problem." It was only in 1939, eight years after Iqbal had chosen Jinnah to lead the

Muslim League following the Roundtable Conference in 1931, that Jinnah is said to have told a small delegation of pro-Pakistan students from Cambridge: "I am getting more and more convinced that you are right in spite of myself." The following year at the Lahore Resolution, when the demand for an independent Muslim state was finally proclaimed, Jinnah espoused the vision of a modern, progressive, Western-oriented country where religious minorities could enjoy the same rights and privileges as Muslims. In his inaugural address as Pakistan's first president in August 1947, Jinnah said that questions of religion and religiosity would diminish, and that:

> in course of time Hindus would cease to be Hindus and Muslims would cease to be Muslims, not in the religious sense, because that is the personal faith of each individual, but in the political sense as citizens of the State (as quoted in Naim, 1979:213).

The partition of the subcontinent into two distinct states, however, resulted in Pakistan being more closely identified with the distinct religion of Islam probably more than Jinnah had ever intended. We now turn to an exploration of what became of the new state politically and economically after Independence and Partition.

Post-Partition Transformations

The period of Pakistan's emergence was one of unparalleled catastrophe in the world's history: for six weeks in the fall of 1947, half as many South Asians perished in the migration following Partition as American soldiers who died in all of World War II. The unforeseen calamity's disastrous effects on the new state of Pakistan were further accentuated by Jinnah's death the following year. Questions of national identity and ideology were overshadowed by the basic issues of national survival.

At the outset, Pakistan's economic situation was weak. The traditional elite (those who remained) were preoccupied with the exigencies of land ownership following the chaotic transitory period. Traders were hesitant to engage in new enterprises for, as Gustav Papanek (1967:28) writes, they were still seeking:

> the prestige of landownership; they divert industrial income to land acquisition, and thus abort industrial development. They retain a trader or a gambler's mentality, unwilling to invest in profitable industries

> that require waiting for returns . . . the development of private industrial entrepreneurs is a slow and difficult process.

There was little industry in which traders could engage as only 1,406 (9.7%) of the 14,569 organized industrial units in the subcontinent were situated in what was now Pakistan. Of these, 59.3% (834) were in the Punjab. These employed some seventy-three thousand workers primarily in such industries as light engineering, metals, food, tobacco, and printing (Arif, 1978). Tahir (1974:4) terms the initial phase a "refugee economy" as the entire governmental apparatus was engaged in the task of rehabilitation. The war with India over Kashmir in 1949 reinforced the notion that the country was under siege.

The economy soon began to improve as immigrant entrepreneurial families located primarily in Karachi began exporting raw materials from Pakistan and importing both light and sophisticated manufactured goods.[10] The economies of southern Sind and parts of Punjab began to expand somewhat and large numbers of migrants flooded the cities of Karachi and Lahore.

There were many conflicts connected to ethnicity which began to surface in the new state: between *muhajirs* [immigrants] and locals; Bengalis and Punjabis; traditional landowners and newer economic groups; etc.[11] Resentment was brewing between the muhajirs and poorer locals as the former were often given replacement homes, shops and factories while the latter remained empty-handed. This resentment, which recently surfaced in the Karachi riots of the Fall of 1986 and which has not yet been resolved, has remained an important variable in Pakistan.

The issues raised in the 1953 anti-Ahmadiya riots were crucial ones for the new state.[12] Jinnah had repeatedly stated that Pakistan should not and will not be a theocratic state, and that people of all ethnic backgrounds and religions would be deemed as equals in the eyes of the state. The brewing resentment was finally channeled against the Ahmadiyas as various groups called for them to be declared a non-Muslim minority. Attention was thus called away from the economy and towards the issue of the nature of the Pakistani state: were Muslims to have a special status? What would it mean to be an Islamic state? What did it mean to be a Muslim in such a state? However, rather than directly address these issues at the time, the state instead clamped down on the protesters. These dilemmas were still skirted in the drafting of the 1956 constitution

which omitted to include "Islamic" in the official name of the republic.[13]

Amjad (1978) sees the first two decades as characterized by the state's strong commitment to the private sector as the engine of economic development and a relentless pursuit of economic growth. An example of this can be seen in the tax system promulgated in the early 1950s and sustained through the late 1960s: while most developing countries were realizing approximately fifteen per cent of Gross National Product (GNP) through direct taxes (and most advanced capitalist states at least five per cent), Pakistan was acquiring merely two per cent of GNP in direct taxes.[14] Industrialists were able to prosper under highly protective conditions; such conditions increased dramatically after Ayub Khan's ascent to power in 1958.

Profound changes fostered by an indigenous government only rarely elected by its own people yet usually backed by the United States hastened the natural course of events concerning industrial development and social transformation in Pakistan. Mohammad Ayub Khan, following a coup d'etat, ruled Pakistan between 1958-1968. This decade is often regarded as Pakistan's "Golden Decade" of economic development. The policies during this period were oriented towards centralizing the state and guaranteeing it an economic base. However, the recipients of government largesse were more likely those groups which would help promote both. By the end of the 1950s, 25-30 monopoly associations, dominated by immigrant businessmen from Western and Northern India (primarily Gujarati-speaking Memons and Khojas residing in Karachi who comprised a part of the "Twenty-two Families") and select Punjabi partners controlled 66 per cent of all industrial assets, 70 per cent of insurance company assets and 80 per cent of total national bank assets. These industrialists had evolved into a capitalist elite. Their wealth and power was--and remains--far out of proportion to their numbers. Most notably, their success is not replicable by new industrial entrants. Theirs is the exception, not the norm.

The initial strategy was dependent in large part on mass infusions of foreign aid (which continue to this time) despite knowing full well that these would also further instigate maldistribution of the existent wealth.[15] The history of this aid is evident in Table II.1.

The government resolved to channel resources to those groups in the country whose average and marginal savings rates were thought to be relatively high, essentially redistributing incomes from the massive agricultural population in favor of a small class of wealthy urban industrial entrepreneurs (Amjad, 1978:2). The first

stage emphasized import substitution; the second promoted export-oriented growth.

TABLE II.1

Foreign Capital in Pakistan, 1947-77[16] (in million $US)

	1947-1954	1955-1960	1960-1965	1965-1970	1970-1975	1975-1976	1976-1977
Total Assistance	372	993	2,365	2,701	2,874	1,158	1,281
% Grants	67.5	58	17.1	8.9	n.a.	1	.7
% Loans (Repayable in Foreign Exchange)	27.2	22.7	78.8	91.1	n.a.	99	99.3

The Planning Commission, initially guided by the Development Advisory Service of Harvard University, was empowered by the state to play an important role in coordinating the import substitution and export promotion policies. However, as Table II.1 shows, the state soon became addicted to the financial assistance which accompanied economic growth. This assistance, however, in effect denied indigenous groups who were not its recipients equal access to growth opportunities, as we shall see in the experiences of the pharmaceutical industry in the following chapter.

The era of the 1960s was the final stage of industrial expansion as economic growth spurted throughout Pakistan. Ayub Khan's design for industry was to build up a powerful, wealthy elite class which was dependent in large part on the state for its growth and benefits. Though all industry prospered, those who developed good relations with the state prospered the most. Many industrialists began to move away from their traditional orientations towards business (seeing it simply as something one does in life for a living, involving reciprocal relationships, based on tradition, with workers) and began actively re-investing profits and adopting western management techniques.

However, labor policies remained archaic, causing underlying frictions to increase. Urban workers became alienated and saw no hope for success; rural landlords were already angry because of Ayub's land reforms. The halcyon appearances of industrial development were deceptive. While the percentage of people living below the poverty line decreased from 70% to 58% between 1963 and 1968, the absolute number of impoverished people increased from 8.65 million to 9.33 million (Naseem, 1973:325). Currents of change were growing stronger: class consciousness was developing,

and class actions were moving closer to the ways of their western counterparts.

To centralize the power of the state, Ayub Khan embarked on a five-tiered system called the Basic Democracies.[17] Only the lower organs of the system were formed through the electoral process, while the higher ones were appointed by the federal government. This system proved indispensable to the military regime as it enjoyed no mass-based political roots.

Papanek (1967) points to the high rates of growth experienced during Ayub's era to signify the advances that such a policy of economic determinism linked to international capital and political institution-building can have. Amjad (1978:6), however, disputes the value of the growth rates. He claims that they were a direct result of foreign assistance and that the aid inflows which:

> removed the foreign exchange constraint, and the creation of an export market and the boost to profitability through the introduction of the Export Bonus Scheme. The slowing down in the second half of the sixties resulted mainly from a decline in foreign aid inflow, which meant a re-emergence of the supply constraint.

The Ayub Khan government formulated the first "Perspective Plan, 1965-85" following the successful Second Five-Year Plan (1960-65). There were political as well as economic motives in forwarding a long-term plan, including the constitutional necessity to reduce income disparities between East and West Pakistan, to expand employment opportunities, and to lessen the need of foreign assistance.[18] The main goals as well as the actual achievements of the first Perspective Plan include:

Goals (in 1965)	**Actual Achievements (in 1985)**
(1) To more than double per capita income (then at Rs. 450) by 1985 through annual average GDP growth of 6.5%.	(1) Actual GDP growth rate recorded at 5.8%; per capita income raised to Rs. 830 (1959-60 prices).
(2) Reduce unemployment from 20% to 4% (including disguised unemployment) by creating 10 million new jobs.	(2) More jobs created although open unemployment increased from 1.3% to 4% in the same period.

(3) Universal literacy	(3) Not achieved; rate of literacy estimated at 27.6%.
(4) Increase investment level from 18.4% of GNP to 22.9%, and national savings from 10.3% to 21.8%, by 1985.	(4) Not achieved; actual level of investment at 15.5%; actual level of savings at 12.1%.
(5) Eliminate dependence on foreign assistance by 1985.	(5) Significant progress made as the 3-year average of the current account deficit in the balance of payments as a ratio of GNP fell from 8.1% to 3.4%.

However, foreign assistance was suspended and economic development plans were minimized following the outbreak of the war in 1965. These conditions were exacerbated after the break-up of the country into two states in 1971 and the global economic recession at that time. Pakistan ended up suspending medium-term planning until 1978 when it initiated the Fifth Five-Year Plan (1978-83).

The 1965 war with India provided an impetus for most Pakistanis to rally around the government. After the army's defeat--particularly after Zulfiqar Ali Bhutto told the masses that Ayub Khan had sold the country out at Tashkent--the government's popularity severely diminished. The political institution-building of this decade was not lasting although it did set a precedent for military intervention in the domestic governing of the country. Most importantly, however, Ayub's program generated increased inequalities between classes and between regions. While growth rates increased, industrial wages stagnated. The resultant contradiction which erupted during the early 1970s was eminently predictable.

The three years of Yahya Khan's rule (1968-71) appear to have been preoccupied with holding the country together. The 1971 national election burst the illusion of nationhood apart as the eastern portion of the country seceded in December and became Bangladesh. Zulfiqar Ali Bhutto's Pakistan People's Party (PPP) came to power in the aftermath of the military's crushing defeat in the 1971 war. The Berkeley-educated Bhutto advocated a wholly different orientation towards economic development, social reform and political organization.[19] The PPP government soon set upon a directed course which included nationalization of factories,[20] land reforms, a new labor policy (which significantly empowered unions) and social welfare programs under the rubric "Islamic Socialism."

While Bhutto's actions and motives have fallen under harsh scrutiny, there is no doubt that his policies contributed two important developments to Pakistan's path of socioeconomic change.

The first development lies in the actual changes which came about. Amjad (1978:10) summarizes this period as having had the professed goal of achieving a more egalitarian society through structural reforms and an expansion of the public sector. Burki (1980:6) attributes the resultant conflict to the clash between traditional institutions that the country inherited and the modern institutions that some groups sought to develop. Yet in pragmatic terms, land reforms in the countryside and labor reforms in the cities, along with the reality of a six year tenure of a democratically elected government, actually did occur.

The second development is perhaps more essential to our understanding of social change which industrialization has brought about in Pakistan in that it is in the realm of ideology. Although the 1972 land reforms did not significantly redistribute power in the countryside, they gave the peasantry something which was certainly absent in Ayub's earlier 1958 land reforms: they gave the people a sense that someday they could actually own the land upon which they worked. Bhutto's "land to the tiller" slogan invoked strong symbols; this, coupled with the labor reforms which advocated worker ownership of factories, created an atmosphere in which the laboring classes began to see themselves as participatory actors.

Bhutto's supporters came from diverse backgrounds and embraced different ideologies, often in contradiction with one another. To the urban progressives, his modernization policies meant the restoration of participatory democracy and the granting of broad fundamental rights. To the rural left, it implied the elimination of the landowning classes as an economic and political force. He enjoyed a following of landlords (he himself was a large landlord in Sind) probably because those landlords' local rivals had taken anti-PPP party tickets. His socialist followers favored participatory democracy in politics and participatory management in industry while the radical leftists believed that his programs would eventually lead to a socialist state.

The 1973 Constitution, for the first time since the founding of the country, declared Pakistan to be an Islamic state.[21] It promised both provincial and national elections on a regular basis with a prime minister to head the government. Fundamental rights were given to all citizens, particularly rights of habeas corpus. It appeared that participatory democracy had finally taken hold. Although there were conflicts between the laborers and the factory owners, even

many in the latter group regarded this as a transitional period. Industrial growth had been overly one-sided in favor of the industrialists in the 1960s; the labor problems of the 1970s were the outcome of such inequities. Many people believed that political stability, characterized by an elected national government, had finally arrived.

This does not diminish the fact, however, that industrial growth per se did stagnate during the 1970s. Many industrialists, especially middle-level ones, preferred to wait out this transitory period. Between the nationalizations of banks, large basic industries, sugar, cotton ginning, and vegetable oil factories, and the increased power of the labor movement, few entrepreneurs invested in industry. Many members of the powerful industrial elite sent their money to Swiss banks, making it quite clear that they were not personally prepared to risk their wealth.

Interestingly, many members of the middle-level industrial class whom I interviewed found themselves actually caught between worlds. While they enjoyed the prosperity from the unheralded industrial growth which was obtained during the 1960s, as a national bourgeoisie they also recognized that this was inherently not a positive growth for the majority of the people and therefore not in the best interests of the country. These men regularly walked on the shop floor and interacted with their workers. They were not consigned to a desk in an office in another part of the city but rather saw, first-hand, how economic ideals remained unrealized by most workers.

Zulfiqar Ali Bhutto had made a lot of promises to appease his diverse constituency, but he was unable--or perhaps, unwilling--to keep many of them. In January 1977, he called for national elections to be held two months later, ostensibly to show the world how much better Pakistan's democracy was working than was India's. That goal was short-lived, for Indira Gandhi was voted out of office and stepped down (though reportedly under duress) while Pakistan was once again destined to undergo the throes of a military coup.

Nine opposition parties had formed a coalition virtually overnight, the Pakistan National Alliance, to oppose the PPP. Although parties advocating religious orthodoxy (e.g., the conservative Jamaat-i-Islam and the Jamiat-i-ulema-i-Islam) as well as secular ones (e.g., the National Democratic Party and Tehrik-i-Istiqlal) constituted the PNA, its unifying claim to legitimacy and viability was its demand that a firm system of Islamic laws be incorporated into the state apparatus. Though not all members of the PNA envisioned similar outcomes of the movement, they all

tried to portray it as both "Islamic" and "just" while portraying Bhutto and the PPP as enemies of Islam--and therefore illegitimate leaders--for not following Islamic principles.

The PPP, with its mass-based support among very diverse classes, enjoyed an overwhelming victory over the PNA in the March elections. Immediately, charges of election fraud and tampering were leveled against the government. Popular protests broke out, demanding the government's resignation. Civil order virtually collapsed in the confusion and as it had done so many times before in Pakistan's brief history when it was unhappy with a political outcome, the army stepped in. On July 5, 1977, General Zia ul-Haq became the Chief Martial Law Administrator (CMLA) in a then-bloodless coup d'etat.

The Zia government initially based its claim to legitimacy on its promise to establish order, accountability, and hold national elections. Following continued postponements of such elections, the Islamization program was ushered in on February 10, 1979.[22] This included a series of new policies designed to implement Islamic law: Islamic economic measures; judicial reforms; the introduction of an Islamic penal code; and a new educational policy envisioned to be in conformity with Islamic tenets. Now that the army had control of state power, the generals were unwilling to relinquish it easily. It took nine years--the longest period in Pakistan's checkered history of military rule--for the military to officially end martial law (on December 31, 1985), though Zia ul-Haq remained on as President and de facto in charge until his death in an airplane crash August 16, 1988.

Many decisions concerning the Zia government's industrial policies seem to have been made on an ad hoc basis.[23] At the outset, the government denationalized all the agro-based industries (e.g., vegetable oil, rice mills, sugar mills) in September 1977. A year later, the government promulgated the Transfer of Managed Establishments Order which empowered the federal government to offer the former owners of nationalized industries proprietary interest in their former units. Strikes and demonstrations were forbidden, and many of the labor reforms enacted during the Bhutto era were rescinded. Essentially, the government dismantled the liberal economic policies of its predecessor and handed the economy back to the vested interests which had managed it during the Ayub Khan era.

As will be discussed in the following chapters, the economy significantly improved during this period. Manufacturing industry grew by 9.9 per cent during the Fifth Five-Year Plan (1978-83) and

by 7.7 per cent during the Sixth Five-Year Plan (1983-88), which is impressive when compared to the overall growth of 6.6 per cent of the Gross Domestic Product in the "Zia decade." A target of 8.1 per cent growth for the manufacturing sector has been established for the Seventh Five-Year Plan (1988-93).[24]

By 1988, nearly 20 per cent of GNP was provided by the manufacturing sector, up from merely 7.8 per cent at Independence, while that provided by agriculture had decreased from 53.3 per cent to 23.8 per cent in the same period.[25] Some claim General Zia was plain lucky: there were no major floods or droughts until the latter period of his rule. Others point to the formidable assistance which the United States channelled to and through Pakistan in response to the 1979 Soviet invasion of Afghanistan and other political events in the region. Other detractors argue that the policy of exporting laborers to the Gulf (initiated by the former PPP government) served to appease the workers who otherwise would be poorly paid, disillusioned and angry.

Concomitantly, leaders of the political opposition were imprisoned or harassed. Members of the Bhutto family were put under house arrest, while Bhutto himself was charged--and ultimately executed in April 1979--as an accomplice in an earlier political assassination.[26]

On August 14, 1983, President/CMLA Zia ul-Haq announced plans for national elections, this time to be held on March 23, 1985. The opposition, now called the Movement for the Restoration of Democracy (MRD), led protests throughout the country, claiming that the government, once again, was merely holding a carrot in front of the peoples' noses to entice them to participate in the upcoming (Fall 1983) local bodies elections, and then would cancel the national elections at some future date. The government held a referendum in December 1984, seeking a vote of confidence for its Islamization program. If approved--as it was by a questionable overwhelming majority--then Zia would stay on for five more years as president. Elections were finally held--on a non-party basis--in February 1985, and some of the government's supporters did in fact lose their seats. Despite much speculation of a postponement once again, President Zia ul-Haq lifted martial law on December 31, 1985. However, the return to a semblance of democracy still overseen by General Zia did little to alleviate economic uncertainties as political activity was strongly focussed on the holding of free and fair elections.

In 1988, the Zia government launched the Seventh Five-Year Plan (1988-93) which emphasized the establishment of more

efficient export-oriented and sophisticated industries. As Pakistan was crossing the World Bank's "line of demarcation" between low-income countries and middle-income countries, the new plan at least gave lip-service to strengthening social development indicators in the country (e.g., widespread provision of public services such as adequate nutrition, health, education, development of human resources). Its orientation is strongly in favor of encouraging private sector development and limited public sector involvement. At the same time, the government prepared a second Perspective Plan (1988-2003) whose goals are focussed almost entirely on improving quality of life indicators. The second Perspective Plan expects a significant shift in the production structure in manufacturing industries, with the engineering and electronics industries claiming a larger share of output and investment. It envisions that by 2003, industries will still be dependent on the import of technology and will be more capital intensive than in 1988 which "will have a direct repercussion on employment" (Planning Commission, 1988:24). However, no mention is made of potential responses by labor groups.

General Zia's death in the August 1988 plane crash is popularly considered to have been an important contributing factor in enabling elections to be held in November 1988. Immediately preceding the election, Benazir Bhutto's rejuvenated Pakistan Peoples' Party had released its Manifesto outlining a number of reforms for the empowerment of the people of Pakistan including provisions for securing basic human rights, employment and political participation. The Manifesto was consistent with the goals pledged in the "Awami Budget" of 1986 in which Benazir stated that:

> The Pakistan Peoples Party believes the role of the government is in creating a society free from social and economic inequalities--a society where there is respect for the individual dignity and opportunity for development and mobility. . . . We want to see that our people are free from hunger and disease, free from oppression and exploitation, free from unemployment and injustice.[27]

The Pakistan Peoples' Party was successful by a slim margin in the national elections and the President of Pakistan, Ghulam Ishaq Khan, invited Benazir Bhutto to become Prime Minister and form a government. While still saddled with existing economic circumstances and inheriting the former government's Seventh Five-

Year Plan, Benazir Bhutto's PPP government commenced in December 1988, hence ushering in a new era of political and industrial prospects.

The Significance of Lahore and Sialkot to the Punjab

An historical review of the special place of Lahore and Sialkot in the Punjab is important to our analysis of the interaction between cultural orientations and industrial transformation. Many developments first observed in the Punjab, including the adoption of new kinds of agricultural implements, seeds, weaving techniques and looms, and modes of industrial organization, are now being attempted elsewhere in the country. Within this province, it is the city of Lahore which has often been the vanguard of change.

TABLE II.2

Population of Selected Cities in the Punjab, 1901 to 1978[28]
(thousand persons)

	1901	1921	1941	1951	1961	1972	1978	Growth rate 1961-72
Lahore	203	482	672	849	1296	2165	2789	4.5
Faisalabad	9	28	70	179	425	822	1175	5.8
Rawalpindi	88	101	185	237	340	615	824	5.2
Multan	87	85	143	190	358	542	665	3.6
Gujranwala	29	38	85	121	196	360	486	5.3
Sargodha	--	18	36	78	129	201	252	4.0
Sialkot	58	71	139	168	164	204	227	1.8
Kasur	22	31	53	63	75	103	120	2.5

As Table II.2 shows, Lahore's population is more than double hat of the Punjab's next largest city, Faisalabad. The rapid growth rates which Lahore once experienced are now evidenced in the

expanding industrial areas of Faisalabad, Rawalpindi and Gujranwala.

Lahore ripples with an ageless grace that belies its history, which dates back no further than the 1st century A.D. Its name is said to be a derivation of Lahawar, the fort of Loh, one of Rama's sons.[29] The first known historical record of Lahore was made by a Chinese explorer, Hiuen Tsiang, who mentions it as a large Brahmanical city which he visited in 630 A.D. on his way to Jullunder.

Prior to Mahmud of Ghazni's invasion, little else is known of Lahore's history. Even Mahmud of Ghazni did not travel to Lahore for more than twenty years after his first invasions into the Punjab as it was not yet considered a place of much importance.

The Islamic history of the city began in 1036 when Lahore was made the capital of the Ghaznivid dominions east of the Indus river. Lahore's political history, however, remained checkered for the ensuing half millennium until the invasion by Babur's troops in 1524.

The period of Mughal rule laid its inscription on Lahore's history as the city grew to be "the grand resort of people of all nations".[30] Lahore still retains many splendid memorials of this period, which witnessed the courts of Humayun, Akbar, Jehangir and Shah Jehan. Jehangir, who loved this city more than any other in his empire, had construction on the Lahore Fort begun during his reign, and instructed that his tomb be built on the city's outskirts after his death. His son, Shah Jehan, built the magnificent Badshahi mosque and had Shalimar gardens landscaped for his daughters' enjoyment, prior to building the Taj Mahal in Agra.

The Sikhs began to gain power in the Punjab after the death of Aurangzeb in 1707. Interspersed invasions for control over Lahore continued for nearly a hundred years. In 1798, Ranjit Singh finally and definitively conquered the city and a virtual renaissance began. Lahore was once again the center of a flourishing kingdom, albeit a kingdom which only lasted forty-one years.

After the British annexation of the Punjab in 1849, Lahore was used as a regional administrative center. This further enhanced Lahore's importance because it became the link between the countryside and the ascendant international capitalist system which the British represented. The British not only built up an infrastructure which connected trade routes throughout the province to Lahore, but they also began renovating the city's architectural treasures which had fallen into disarray. The political, economic and cultural importance of Lahore - while existent for nearly two millennia - was now clearly established and accepted.

Following Independence, Lahore became the capital of the province of Punjab, and to this day epitomizes the city of the subcontinent: parts of it remain in agricultural use; Hindu, Mughal and Sikh symbolisms (e.g., inscriptions on buildings, religious artifacts, etc.) constantly remind its populace of its diverse and rich heritage. Lahore, the Asian city: long *chai*-breaks and legal typists lining the streets, sitting beside their typewriters, waiting for the next illiterate soul who is caught up in some "case" (which could continue for an eternity) to employ their services. Lahore is what every Muslim city is: the effervescent sanctity of the call to prayer, which may or may not pervade one's sensibilities; women going around the city, some in the veil, others instead with their dupattas lightly falling around their necks in the "modern" style. Yet Lahore is also every major city in the developing world, where transnational corporations dance out their advertisements in neon lights; beggars line the streets, exposing their often self-inflicted wounds for a few coins; and the rich ride around in Mercedes Benz automobiles. More than anything, Lahore, like other large cities in the Third World, is in flux. Values are changing, though its populace is hard put to articulate what these changes are. Religion is said to be important, more important than ever, but attendance at mosques has not noticeably increased.

This is the city which Punjabis primarily migrate to when they leave their villages. In 1978, Lahore was home to 819 registered factory units, which constituted nearly a third of the total number of registered factories in the Punjab. On average, 91% (743) of these units employed less than a hundred workers each. The principal indigenous qaums in Lahore district are Arains, Gujjars, Jats, Kambohs, Meos, Mughals, Pathans, Rajputs, Sheikhs, and Syeds. Although many of Lahore's inhabitants are native "Lahoris," the large number who are not often maintain strong ties to their ancestral villages and families. This is most apparent during holidays, especially Eid, when the trains, busses and minibuses are filled to capacity going just about everywhere.

Yet Lahore is a marginal metropolitan city; it has not made a fundamental break with the traditional world as Karachi has. Its inhabitants often identify themselves using traditional terminology: *zamindar* [landlord]; *karubari/tajjer* [merchant/ trader]; and *nauker* [servant], those who serve the former two groups. The practice of using a denotative term such as nauker, whether to describe a cook, a mechanic in a petrol station or a semi-skilled lathe operator in a re-rolling mill, was not eliminated despite all of Zulfiqar Ali Bhutto's social legislation, and still resists any suggestion of change.

A crowded bazaar area in Lahore

The entrance to Lohari Gate in Lahore

A laborer transporting goods on a hand-drawn cart in Lahore

It is in this milieu that we try to discover what is changing, how change comes about, and what causes it. In some instances, tradition has been discarded in favor of a "modern" view; in others, it has been transformed so that it at least flows along with modernity.

Sialkot offers a different picture of industrial Punjab from Lahore. The only one of the four Punjabi cities historically associated with industry that was included in Pakistan, another typology of development for Pakistan has been established here. Different from the industrial evolution of Lahore, Sialkot's growth is significant nonetheless for less developed areas of the country.

Sialkot's early history is closely tied in with both Hindu mythological legends and Punjabi folk tales dating back some five thousand years. Once a capital city of the Greeks, the Huns, and countless Hindu kingdoms, Sialkot was first conquered by Muslim armies in opposition to the Ghaznavid kings (by then firmly entrenched in Lahore) in 1184.

Four years before invading Lahore, Babur's armies entered India via Sialkot. Sialkot too prospered under the Mughals, but this prosperity declined when the empire did. Ahmad Shah Durani, arriving from Afghanistan, conquered Sialkot in 1748 and ruled the city for three years. Following a period of different Hindu kings, Ranjit Singh finally added Sialkot to his empire (of which Lahore was already the capital) in 1807. Upon his death, the city was administered by the British.

In addition to the manufacture of sporting goods (extensively covered in Chapter Five), pre-Partition Sialkot laborers also engaged in paper-making, *koft* [damascened ironwork, predecessor of the contemporary surgical goods industry] and brasswork. The only factory registered under the Factory Act as of 1920 was the Uberoi sports unit, although there were also some flour mills, saw mills and ice factories in operation.[31] Contemporary industries also include agricultural implements, musical instruments, rubber goods, small hand tools, crockery, etc., for a total of 145 factory units (5.2% of the total in Punjab). Indigenous qaums in Sialkot include Arains, Awans, Gujjars, Jats, Meos, Mughals, Pathans, Rajputs, and Syeds.

The sights and smells of Sialkot are of a different order than Lahore's. Horse-drawn tongas are in plentiful supply as they ease down thin alleyways purportedly referred to as streets. Sialkot prides itself as the birthplace of Allama Iqbal. The city's pragmatism becomes evident when viewing its industrial area: workshop upon workshop of boys and men, laboring together, making balls, gloves, bats, all sorts of sporting goods. This is a city at work, which moves about briskly in the morning, and closes up early in the evening.

Notes

1. Source: World Bank *World Development Report 1988* (Oxford University Press, 1988).

2. For an elaboration of this in the South Asian context, refer to Maulana Ashraf Ali Thanvi *Bahishti Zewar (Heavenly Ornaments)* trans. by Muhammad Masroor Khan Saroha (Lahore: Sh. Muhammad Ashraf, 1981) and to Hanna Papanek and Gail Minault (eds.) *Separate Worlds: Studies of Purdah in South Asia*, South Asia Books, 1982.

3. The zenana was often the darkest, coldest section of the house, rarely providing a healthy environment. Mazhar ul Haq Khan (1972, particularly pp. 102-146) gives a descriptive account of life in the traditional zenana.

4. For an insightful elaboration on the creation and impact of the canal colonies on class relations, refer to Imran Ali *The Punjab Under Imperialism, 1885-1947* (1988).

5. For a colorful, valuable account of how goods were transported during the period of the Raj, see W.P.Andrew *The Indus and Its Provinces* (1857, Reprinted in 1976).

6. The great cotton manufacturing center nearest to Punjab was Bombay, to the south on India's western coast. D.R.Gadgil (1971) gives an account of the history of the Bombay textile industry, which encouraged the rise of such well-known Indian industrial families as the Tatas and the Birlas. A concise overview of industrial evolution in South Asia can be found in Spate & Learmouth (1954:305-30).

7. For further historical analysis of this time period, see A.H.Alberuni *Makers of Pakistan and Modern Muslim India* (Lahore, 1950); J.N.S.Baljon, Jr. *The Reforms and Religious Ideas of Sir Sayyid Ahmed Khan* (Leiden, 1958); and David Lelyveld *Aligarh's First Generation: Muslim Solidarity in British India* (Princeton University Press, 1978).

8. For more information on the Deoband movement, refer to Barbara D. Metcalf (1982) and Ziya-ul-Hasan Faruqi (1963). For a critical assessment, see Hamza Alavi "Ethnicity, Muslim Society and the Pakistan Ideology" in Anita M.Weiss, 1986:29-30.

9. Fazlur Rehman (1982) presents a fascinating elaboration of the "modernization" of the Islamic intellectual tradition.

10. Raw materials accounted for 90 per cent of the country's total exports in 1951.

11. Sayeed (1980:33-46) details many of the communal conflicts which contributed to tensions leading up to the military coup in 1958.

12. In the late 19th century in India, Mirza Ghulam Ahmad proclaimed himself as the latest prophet of Islam. Vehement conflicts have thereafter emerged with other Muslims who regard the Prophet Muhammad as the "seal of prophecy," the very last of the prophets.

13. The Republic of Pakistan was renamed the "Islamic Republic of Pakistan" in the later two constitutions of 1962 and 1973.

14. In 1987-88, the government (Planning Commission, 1988: 331) recorded that it received fourteen billion rupees in direct taxes for a total of 15.6 per cent of total tax receipts (11.9 per cent of total revenue receipts).

15. For further elaboration on the thrust of the state's initial economic strategy refer to Mahbub-ul-Haq (1963), Gustav Papanek (1967), and Lawrence White (1974).

16. Source: Figures compiled from the various Five-year plans and other documents, as reported in Awan (1978:5-6).

17. Huntington (1968:251-55) gives an extensive elaboration of this system. Sayeed (1980:143-148) discusses the Basic Democracies system's impact on the mass urban protests which ultimately brought down Ayub's government.

18. This information is based on the review of the First Perspective Plan provided in the "1988-2003 Perspective Plan" in Planning Commission, 1988:22-23.

19. Political scientists writing on this have labelled the Bhutto government "Bonapartist." For further elaboration, see Sayeed (1980) and Richter (1986). For an elaboration of socioeconomic changes during this era, refer to Shahid Javed Burki (1980a).

20. 32 large private sector industrial units were nationalized under the 1972 Economic Reforms Order.

21. For further elaboration on the three constitutions, see Gankovsky and Moskalenko (1978). Weiss (1986) addresses the degree to which Islamic laws were incorporated into the three constitutions.

22. For an elaboration and critical assessment of the Islamization program, refer to Anita M. Weiss (ed.) *Islamic Reassertion in Pakistan: the Application of Islamic Laws in a Modern State* (Syracuse University Press, 1986; and Vanguard Books Ltd, Lahore, Pakistan, 1988).

23. For a good overview of the legacy of Zia's government on Pakistani politics and economics, refer to Shahid Javed Burki, 1988.

24. Source: Planning Commission, 1988:305.

25. Source: Government of Pakistan, 1988:16-17 (in Statistical Appendix).

26. Benazir Bhutto's autobiography *Daughter of the East* (London: Hamish Hamilton, 1988) provides a powerful account of the government's treatment of herself and her family.

27. This abstract of the PPP policy statement on the economy which was presented in Pakistan in 1986 is reported in (no author) *Benazir Bhutto: the Way Out: Interviews, Impressions, Statements and Messages* Karachi: Mahmood Publications, 1988:75.

28. Bureau of Statistics, Government of the Punjab (1978:325). These population estimates were made on June 30, 1978. The most recent population figures for Lahore are 3.5 million, based on the 1981 District Census Report (Feb. 1984).

29. *Districts and States Gazetteers*, Vol. I, 1976:315.

30. *Districts and States Gazetteers*, Vol. I, 1976: 305.

31. *Districts and States Gazetteers*, Vol. II, 1976:375.

3

The Pharmaceutical Industry

The indigenous pharmaceutical industry in Pakistan is of fairly recent origin, for few firms were operating in this northwest corner of the South Asian subcontinent prior to Partition in 1947.[1] Since that time, the industry has experienced three successive waves of growth, each characterized by distinctive types of entrepreneurs and accompanied by differing sociopolitical circumstances. This was followed by a fourth stage of industrial stagnation occurring during the Zulfiqar Ali Bhutto era. Uncertainty regarding the future came to dominate decision-making during the tenure of Zia ul-Haq's government and continues to persist in the industry.

Many of the contemporary leaders of this industry have made the transition from traditional orientations towards work and trading to modern forms of industrial management and expansion. First ushered in after Partition by men who had previously been involved in trading and who felt that there were profits to be made in repacking and manufacturing pharmaceuticals, the industry flourished. The federal government assisted the new industrialists as much as possible, largely through generous import licenses. In time, pharmaceutical professionals and other skilled workers also began to undertake production, though not simply because they thought it might be profitable but rather because they were convinced that there was a need in Pakistan for widely available locally-manufactured allopathic medicines. Thus, it was mainly by chance that the first group of pharmaceutical manufacturers entered into this industry in Pakistan. They were markedly successful in an industry in which they had no previous knowledge, helped by foreign manufacturers eager to set up joint ventures and by their own government.

These men overcame both individual and social conditions which inhibited participation in industrial development (of the western form): they left their families' traditional homes and occupations; combatted the widespread popular acceptance and usage of unani medicines; and faced a system of labor organization initially unsuitable to accept industrialization at the factory level. These men entered this field optimistic about its prospects even though the following three conditions prevailed:

- There was little local expertise in the pharmaceutical field;
- A growing number of foreign pharmaceutical firms, with access to greater technology and financial resources, as well as possessing strong international reputations, were entering this field in Pakistan simultaneously;
- During the initial stages of the industry, there were strict import quotas and restrictions by the government (later followed by regulatory schemes which generally limited expansion), thereby making the profitability of this industry problematic.

As we will see, political factors (and fortunes) strongly affected the nascent pharmaceutical industry. In addition, local units either had to give up some measure of independence by engaging in joint ventures with foreign pharmaceutical companies which had entered the Pakistan market or choose to compete in the marketplace with less popular though noncompetitive items. Such practices came to characterize this import-substitution industry. Some basic manufacturing of pharmaceuticals was eventually begun, but remains on a small scale.

Traders had not regarded this field as thriving or profitable before Partition, even though the British had imported and occasionally repacked allopathic medicines during their tenure in India. Instead, traders regarded other kinds of industries such as cotton ginning, rice mills and textile factories as wise investments.[2]

That a group of men would choose to enter into this field despite the presence of the significant obstacles mentioned above is important to consider. Four problems stand out as striking in this regard. First, a large percentage of the population embraced an inconsonant orientation towards health care based largely on *unani* and folk practices. Though the exigencies of Partition caused much of the traditional society to undergo change, it was unclear whether the increased usage of allopathic pharmaceuticals would be welcomed as part of that change.

Second, as mentioned above, though the British had sometimes repacked medicines, it was not perceived as a profitable business and other ones were preferred instead. This industry, however, was also identified with the West as it had been introduced into India by the early British colonialists and promoted by the British Raj over unani and *ayurvedic* medicines. Despite the vacuum which had been created in the industrial sphere by the exodus of the Sikhs, Hindu *banias*, and many Parsis to India (which created many opportunities for aspiring entrepreneurs), the men who entered this field just after Partition made the decision to manufacture and repack primarily

allopathic pharmaceuticals as opposed to unani ones (though a few units have manufactured both).

Third, these entrepreneurs did not come from families which had been engaged in this occupation, as was the case in the sporting goods industry and to a lesser extent in the steel re-rolling industry. Most of these pharmaceutical entrepreneurs were themselves ignorant of the industry though they made sure to surround themselves with skilled technicians. It is not until the second stage when we see the skilled traditional *pansari* [mixer of chemicals in unani] enter this field.

Finally, the existence of strong external competition in the form of foreign firms such as Pfizer, Bristol Meyers and Lederle may well have been a deterrent for indigenous businesses. As Gereffi (1983:190-253) has documented, the goals of many transnational pharmaceutical firms are often at variance with those of the state in the Third World. Sometimes, the assets of a firm may be greater than the Gross Domestic Product of the country in which they are operating. A common assumption would be that local manufacturers would not want to compete with such companies operating in Pakistan. However, as it turned out, the presence of the foreign companies cleared the path for the indigenous ones, assisting them not only in joint ventures but in indirect ways as well. These foreign firms had access to greater technology, financial resources and business expertise than did the indigenous ones, and actively developed local demands for their products. Therefore, the earliest group of entrants was largely eased into the industry by the assistance of foreign counterparts.

Though the foreign companies' initial benevolence waned by the time the second wave of industrialists entered this field in the mid-1950s, the role of benefactor was soon taken over by Ayub's government. This role reached its zenith with the entry of the third wave of entrepreneurs, basically western-oriented businessmen, in the mid-1960s.[3] By the time Zulfiqar Ali Bhutto's government came to power in 1971, the indigenous industry was strong, though basically uncontrolled, and marked by an astounding number of over two hundred manufacturing units. Industrial growth in this field became constrained as it took a back seat to labor reforms and political expediencies.

Traditional Orientations Toward Health Care

This section provides a backdrop to the sociocultural environment in which pharmaceutical manufacturing grew in the Punjab. As

T.N. Madan (1969:1477) writes concerning a similar situation in India, "the co-existence in a society of traditional and modern professional services represents a situation full of interest for sociological inquiry," particularly when external forces become important considerations for their maintenance. *Hakims* [unani practitioners] do not need an industrial network to provide their patients with necessary treatments; allopathic doctors can do little without available pharmaceuticals. We seek to lay a foundation for clarifying what aspects of the culture underwent transformation when the British brought in their allopathic medicines and underlying value systems, for concepts of health and illness are inextricably linked with culture.

There is a rich heritage of medicinal usage from a variety of traditional sources which remain highly regarded. In pre-Partition Punjab, different areas and religions stressed different forms of practice, though much borrowing resulted due to strong bonds of interdependence and mutual respect. Two medicinal systems, *ayurveda* (associated with Hinduism) and *unani* (associated with Islam) have been popular[4] along with certain types of folk practices.

Ayurveda is derived from the Sanskritic tradition and is based on the interaction of nature and the spiritual planes. Remedies for herbal and psychic cures were first recorded in the ancient Rgveda some 6500 years ago. Later compiled and further elaborated upon in the Ayurveda between 2500 and 500 B.C.,[5] this system has been closely associated with its religious basis, though it was occasionally used by Muslims in North India.

More common among Muslims has been the unani system of medicine. Islam enjoins the learned scholar to acquire more than spiritual knowledge: he should also know how to heal a person's body. There is a hadith of the Prophet which says "There is no disease for which Allah has not sent a cure".[6] Unani has historically been the vehicle uniting Islam with medical practices. It is based on the concept of equilibrium of the entire body, the destruction of which causes illness. The hakim mixes herbs and spices in such a manner as to restore the body to its proper balance.

Rooted in the philosophy of the early Greeks, notably that of Hippocrates and Galen, unani was further elaborated upon during the Abbasid Caliphate, when it became intermixed with Persian and Indian concepts within the developing Islamic culture. Scholars from diverse backgrounds and religious orientations came to Jundishapur (in southwestern Iran) which had been a center for science and medicine for many years. They contributed to its initial formulations by recording various diseases and developing a "materia-medica"

based on the available drugs and medicinal plants in Central Asia. An "Islamic medicine" developed as a synthesis of the various medical traditions which had been translated from Greek, Pahlavi and Sanskrit into Arabic. Physicians gradually began to be brought to the court in Baghdad, which developed into the new center of learning.

Unani was finally systematized in the 11th century work of the renowned Muslim scholar, Ibn Sena (Avicenna). In *The Canon of Medicine*, Ibn Sena discusses all aspects of diagnosis, treatment, drugs and philosophy relating to medical theory (Nasr, 1968:219-220), seeing the task of medicine as:

> the restoration or preservation of that state of equilibrium which is called health. . . . Islamic medicine considers the "elements" of the body to be blood, phlegm, yellow bile and black bile. These four humours are to the body what the four elements--fire, air, water and earth--are to the world of Nature. . . . The particular constitution or temperament of each person is unique; no two people can be treated medically as though they were exactly the same subject, with identical reactions to external stimuli.

Medicines used in unani must never be *haram* [forbidden] according to Islamic tenets. For example, no alcohol should be drunk without other accompanying drugs, nor is the organ of a restricted animal to be used. While the use of animal bloods had previously been a common practice, it is prohibited in Islam as being *makru* [unclean] and is avoided in unani. Given the strength of this pharmacological tradition, Muslims assume that remedies are available which are consistent with Islamic injunctions, an important consideration which the allopathic pharmaceutical industry has had to confront in Pakistan.

Hakims scattered throughout the Muslim world after the decline of the Caliphate and the Mongol invasions into Persia. Many hakims came to the subcontinent with the invading Muslim armies and settled in Sind and Punjab. Their fate became inextricably linked with those of the Mughal dynasties which supported them. The emperor Akbar's government in particular gave hakims great importance and assisted them in establishing many hospitals and clinics during his tenure.

The presence of allopathic pharmaceuticals is relatively recent in the history of the subcontinent. Their popularity was not contingent as much on persuading people to employ medicines in the first

place (as in some other underdeveloped countries), as on convincing them that these drugs were qualitatively superior to what they had been using.

Allopathic medicine first began to receive some attention in India during Shah Jehan's reign. Gabriel Boughton, a surgeon on the British ship Hopewell (as well as an employee of the East India Company) is said to have saved the Emperor's badly burnt daughter in 1636. As a reward for this service, permission was then granted for the East India Company to trade in Bengal.[7] Boughton remained at the royal court and was eventually joined by other European physicians who served the Mughals and Sikhs. The most notable among these men was John Matin Honigberger, Ranjit Singh's personal physician and later the director of the first hospital in Lahore.[8] However, these Europeans only served native princes and nawabs Unani remained prominent until sometime after the death of Aurangzeb when, like the Mughal empire itself, it too fell into confusion and disarray. After the fall of Delhi and Bahadur Shah Zafar in 1857, the British gained full power and the practice of unani suffered from both neglect and the British emphasis on allopathy.

Charles Leslie (1973:218) notes in his discussion of the professionalization of traditional medicinal systems in India that no matter how conservative or progressive the traditional culture may have been in any specific institutional structure, the "whole pattern of traditional culture began to appear backward and inflexible" to both the British and the small minority of indigenous westernized classes who considered the two indigenous medicinal systems as nothing more than folk medicine. Bernard Cohn asserts that though the British seemed to thrive on the elaboration of India's bountiful cultural heritage, this preoccupation with her history was more likely tied to the concept of empire--enhancing England's prestige because she was thus able to conquer a great people--than the result of any innate respect or admiration for it.[9] Though the British determined that some indigenous social institutions were worthy of preservation, unani, to its detriment, was not selected as one of them.

Folk practices among the Muslims of the subcontinent have been based largely on hadith of the Prophet regarding health, drugs, hygiene, etc. The Prophet is said to have told his followers that treatment for illness is *farz* [mandatory]. If medicine is available one must use it, but if it is not, or does not appear to be working, then prayer can be used as a supplement. While God's help is often sought through prayer, such devotions should not be used in lieu of proper medical treatments. However, in rural areas where standardized health care has historically been essentially absent, prayer

and customs associated with prayer such as the use of *taviz* [amulets containing Qur'anic verses either in the form of letters or numbers] or the intervention of a *pir* [a religious man considered to have mystic powers] have been popularly followed. When allopathy or unani fail to work, pirs are often sought out.

Local superstitions often credit *djinns* [supernatural troublemakers] and the like with causing diseases, especially epidemics, or perceive them as actually "possessing" the afflicted person, especially in the case of a sudden attack. However, even though individuals may sometimes blame superstitious beliefs with causing disease, they would usually consult either a hakim or a pir for most medical problems.

Stories of djinns and other superstitions, while still existing in Pakistan, are not as prevalent since the introduction and now widespread use of allopathic medicine, which has done much to transform the health care system. An important social development is implicit here, for it has freed the people from the suffering of many curable diseases. Epidemics in particular have been greatly curtailed since the drugs are inexpensive enough to warrant widespread distribution. Millions died in the 19th century from cholera, plague and malaria epidemics. The plague alone accounted for nearly three and a half million deaths from 1904-07 in India. In Pakistan, the life expectancy was 22.6 years for men and 23.3 for women at the turn of the century. It had risen to 30 years at Independence and in 1987 was placed at 61 years by the Planning Commission (1988:311).

The Development of the Pharmaceutical Industry

Prior to the 1930s, there was no allopathic pharmaceutical industry in the Punjab. Only medicinal herbs had been cultivated for export. Some of the more abundant ones had been fumaria parviflora [shahtara], onosma echioides [ratanjot, roots used for oils], and peganum harmala [harmal seeds, used as a substitute for quinine], all of which were once popular in the West.[10] By the early 1900s, even this type of industry was dying out, as Latifi (1911:151) noted in 1911:

> It should be kept in mind, however, that fewer drugs are used in Europe and America than formerly, and there is besides a tendency for synthetic medicines to displace the cruder ones yielded by the vegetable kingdom. There is now little demand (for medicinal

herbs from the Punjab) save for a few staple products, such as rhubarb, jalap, opium, cinchona, etc.

A Hindu bania opened a factory in the Lahore suburb of Moghulpura in 1932 on a very limited basis. It produced simple spirits and tinctures mainly for the military. The factory was constructed in the old style of Punjabi buildings: large, high and therefore very cool. It was built to have the railway line run right through it. The building does not stand out as separate or alien from the *muhallà* [neighborhood] which surrounds it and from which it draws its workforce, but rather is neatly incorporated into the community. Now, as in the time it was new, people lie on *charpais* [string beds] near the entrance, smoking the *hookah* [tobacco-filled water pipe], congregating in leisure. The former Hindu owner, who remained in Lahore until the mid-197Os, made few changes or improvements over the years. A sense of timelessness as well as stagnation is felt from the factory. For want of an heir, the owner sold out to a Muslim chemist in the 1970s and then migrated to India.

The only other company operating before 1947 was also manufacturing galenicals--tinctures and spirits--though little else is known about its history before its change in management in 1968. It is now located on Sheikhupura Road, the industrial area just outside of Lahore.

At Independence, there were few pharmaceutical companies operating in Pakistan (only two in western Punjab). The Indian Punjab, however, inherited three large-scale and 37 small-scale operating pharmaceutical units. The Indian government strongly encouraged their development, for it viewed the pharmaceutical industry as serving a vital social need and as an industrial asset.[11] Many foreign firms first looked for collaborators among Indian companies, only later glancing over to explore possibilities in Pakistan.

Those companies which existed in the fledgling industry in Pakistan in 1947 were concerned with manufacturing only tinctures, spirits and simple syrups. Unlike the sporting goods industry which flourished before Partition and only experienced a change in management after it, the pharmaceutical industry was virtually born with Pakistan. In November 1947, the Pakistan government convened the All-Pakistan Health Conference in Lahore. Although the conferees decided little in the form of actual policy, they organized the national Health Department and agreed to study various issues which would benefit the health-care situation in the country, one of which was the creation of an indigenous pharmaceutical industry. In 1949, the Drugs Technical Advisory Board was constituted to oversee the

administration of the Drugs Act of 1940 (adopted by British India) whose stated purpose was the regulation and control of the import, manufacture and sale of drugs and medicines. In practice, however, the earlier Act's concern had been with the importation of finished products from foreign companies. It was now determined that more attention would have to be given to the local companies operating within Pakistan if the country was ever to achieve its goal of providing standardized, inexpensive medicines to its people. However, also at this time, the government unsuccessfully attempted to establish a drug testing laboratory to check for substandard medicines.

The main thrust in the growth of the indigenous pharmaceutical companies in Pakistan apparently occurred in three stages. The first stage consisted of units being set up just after Partition primarily by immigrant traders (specifically from Sheikh and Arain qaums),[12] in lieu of businesses which they had left behind in India. The second phase was just after the Korean war boom, when the economy was becoming stronger and focused more on import substitution industries. Professionals, either graduates from pharmacy schools or experienced workers, having some previous knowledge of pharmaceuticals, began to set up factories during this period. The final stage of growth was in the mid-1960s during Ayub Khan's "Golden Decade of Industry." The backgrounds of these industrialists appear to be mixed: some had been technicians at other companies, while the rest (generally educated in the West) were interested in entering industry and assumed that this would be a profitable one. Interestingly, it was the latter group which tended to have the worst relations with their unions during the Z.A. Bhutto era. Under the PPP government, there was virtually no growth in the indigenous industry due to the 1971 Generic Scheme, the fear of nationalizations of factories (though none, as it turned out, in pharmaceuticals), and the Drugs Act of 1976. Although the economic climate per se substantially improved under the regime of Zia ul-Haq, some uncertainties which surfaced under the Bhutto government continued to persist and few industrialists were eager to invest.

Four stages of development: The first, at Partition

Many of these early industrialists had been traders in India before 1947. They were given shops by the Pakistan government as replacements for the businesses which had been left behind when they migrated to Pakistan. They knew little about the intricacies of the pharmaceutical field, but since they had been handed drug stores as replacement shops they felt that there was a potential in repacking

(and later in manufacturing) pharmaceuticals. They surrounded themselves with skilled technicians so their unfamiliarity with the industry proved to have minimal effects. Their expertise in business is what helped this group of men to thrive for they attempted to fill the industrial vacuum created by the diaspora of Hindu banias to India in 1947. Other entrants in this group set up pharmaceutical companies in concert with other factories which their enterprising families were starting just after Partition, again, to fill the industrial vacuum. Chance regarding choice of fields, business expertise and immigrant status characterize this group's entry into the field. The government did all it could to aid this group, who were also encouraged by their foreign counterparts eager to arrange joint ventures with them. Thus, welcomed by both foreign manufacturers and their own government, this group's entry into pharmaceutical manufacturing was markedly successful especially in an industry about which they had little or no previous knowledge. The early entrepreneurs were optimistic about their prospects in the industry, even though there were five factors which loomed over the industry's growth.

First, as mentioned earlier, at the time of the industry's inception in Pakistan, the usage of these allopathic drugs was minimal compared to that of unani medicines. Galenicals and spirits were the only local drugs being produced at that time. The industrialists had to believe that they, with their business expertise, could create a demand for allopathic pharmaceuticals. This relates to the second factor, that a growing number of foreign pharmaceutical firms were setting up plants in Pakistan. Although far more powerful than the local units, their presence initially benefitted the Punjabi firms as the foreign corporations located their units in Karachi, which gave increased opportunities to Punjabi units over Sindhi counterparts. This factor was also minimized as more local companies entered into joint ventures with foreign firms. The issue of the quality of a foreign product versus that of a local one was a moot point at this time, though it was to become central two decades later.

The third factor was the fear that the Karachi-based indigenous elite might also enter this field. Their wealth and access to political power would probably have lessened the chances for success of the Lahori industry. However, the Karachi industrial elites instead preferred to focus their resources on capital-intensive projects such as banking, insurance and secure export-oriented industries, thereby leaving no other indigenous elite as possible competitors.

The fourth factor regarding the first group's entry into the pharmaceutical industry concerns the problem of lack of expertise in the pharmaceutical field. Not only did the entrepreneurs have little

knowledge of the business, but there were no degree programs in Pharmacy at either King Edward Medical College or at Punjab University, the two leading medical-oriented institutions of higher learning in the Punjab at the time.

Finally, during the initial stages of the industry, there were strict import quotas and restrictions by the fledgling government (later followed by regulatory schemes which generally limited expansion, as explained in Chapter Two), thereby making the overall profitability of an import-substitution industry at this stage problematic.

These first units were set up primarily by immigrant traders, specifically from Sheikh (Khatri) and Arain qaums. These men came from entrepreneurial backgrounds, were largely financially independent, and had few ties to land. A major influence in their development was the nationalist fervor of the Muslim League which had encouraged Muslims to enter industry. The pharmaceutical field appeared encouraging for it did not require much background knowledge at the time. Pakistan's economy was based mainly on import substitution and had not yet begun its own basic manufacturing in almost any industry. Therefore, this group did not have to contend with any predecessors.

The pharmaceutical industry at this time was mainly concerned with converting bulk pharmaceuticals into dosage form, essentially repacking what was produced abroad by foreign companies. According to industry leaders, firms were set up as a result of the rootlessness which was felt after Partition and a desire on these men's parts to enter industry in the young country.

From such a beginning came one of the largest of the indigenous pharmaceutical companies, Lahore Chemical & Pharmaceutical Works (LCPW). Shortly before Partition, Mumtaz Ahmad Sheikh came to Lahore from Dalhousie, in Gurdaspur district (currently in Indian Punjab). With little formal education, having only studied until age thirteen, he started an army contract business which soon spread throughout northern India. Sheikh came from a trading family; his father, Fazal Din Sheikh, had owned a general store in Dalhousie. After Partition, Sheikh left the army contract business and applied for a replacement shop for his former store in Dalhousie. His family was given a chemist shop which had formerly been owned by Sikhs, Jagat Singh & Sons, on Mall Road in Lahore. Though Sheikh himself knew little about this business, he hired some experienced people who enabled the reborn shop, Fazal Din & Sons, to become successful. In 1953 he set up LCPW in a research institute by the Canal Bank. They began manufacturing tinctures, spirits and

syrups as had factories before them, but also included tablets. Sheikh recalls why he set up the manufacturing company:

> Because, in those days, I thought there was a future in this, because ultimately we would have to go into production, and we will have to produce things here. . . . My father, he was a very religious man, and he said this is a business where you can serve humanity.

LCPW went into joint ventures with some foreign firms, producing such items as aspirin and quinine tablets under license from them. In 1959, Sheikh moved the factory to its present location on Ferozepur Road, and continued to enter into contracts with foreign firms such as Schering (Berlin) and Bristol Myers. Half of the company's shares is owned by Mumtaz Ahmad Sheikh and his four sons while the other half of the shares belong to his younger brother and his family.

Another firm which began at this time was also established by a man from the same qaum, Sheikh. Sheikh Mohammad Iqbal of Punjab Drug House (PDH) came from a rich mercantile family from Kasur, a town located just by the Indian border in Pakistan. The family had owned a number of industries in Kasur including a cotton-ginning factory, a flour mill, and an oil mill. His father had set up the mills in 1912 and 1920 while another close relative had started a tannery. At Partition, Sheikh Iqbal was studying for his Master's degree in Persian in Lahore, but had to drop those plans and return to Kasur due to the chaotic conditions on the border. His family allowed the new government to use one of their factories as a refugee camp. He and his other relatives who were students at the time energetically jumped into helping out. They had been strongly influenced by Jinnah's speeches when they were in Islamia College in Lahore and idealistically set about building a new country.

The cotton-ginning season began in the early fall, and in the midst of all the confusion the local people and the immigrants were able to gin the entire cotton crop. This forestalled economic disaster and famine in the area. Coming fresh from this experience to Lahore, Sheikh Iqbal began working at the provincial Secretariat offices. His maternal uncle, a doctor, had a chemist shop just outside the Walled City by Lohari Gate, and urged him to quit the government service and join him in his business. Family ties being strong, he did. He took a short course in dispensing and came to like the industry. One day, a visiting excise inspector asked him when he was going to begin manufacturing. Seeing that there was "a lot of scope

for that," he employed a pharmacist and applied for a license from the government. During this time, the government was urging people to set up industries, and Sheikh Iqbal received his license after only a few months. Though his company began manufacturing in the Lohari Gate shop, they moved to their present location on Nicholson Road after six months, in November 1948. PDH set up an additional factory on Sheikhupura Road in 1979.

A third company which had its start just after Partition was Unison Chemical Works, located on Multan Road. Mohammad Siddiq, an Arain, began it in 1951 after having been a chlorine forwarding/clearing agent for a number of medical stores in Anarkali. Whereas Mumtaz Ahmad Sheikh and Sheikh Iqbal had come from strong trading and privileged backgrounds, had been educated in English, entered the pharmaceutical industry with little prior background in it though strong in business, and now have factories employing a few hundred workers, Mohammad Siddiq's experiences have been much different. His family were zamindars from Sialkot district. Because he disliked farming, he had set up a bus transport service, the Agra Punjab Bus Transport Company, prior to Partition. He gave up the transport company after a short time in favor of a clearing agent business. While his father was uneducated, he himself had studied until the eighth grade in an Urdu medium school. When I asked him why he had become involved in this business, he replied:

> After getting to know the business [as a medical clearing agent], I felt that it was a good business line to pursue . . . I felt it is profitable and is a respectable profession so I started doing it.

He began by importing magnesia and Epsom salts from a British firm in Lancashire. Due to the success which he had in selling those goods, he decided to import machinery for manufacturing tablets and injections. In 1952, he wrote to the pharmaceutical association in Germany and was put in touch with various manufacturers of pharmaceutical machinery.

At the time, he employed about fifteen people. The company's financial condition wasn't strong enough to import the necessary machinery, as LCPW and PDH were able to do, so instead they used the catalogues which were sent from Germany to have local *mistris* [craftsmen] manufacture the machines. Among others, five single punch tableting machines were produced at that time.

The situation of the Pakistan economy, based largely at this point on import substitution, must be recalled so as to understand

why these patterns of enterprise evolved. The government's policy in terms of promoting the industry was very clear: to give as much help as possible, mainly in the form of import licenses. The slogan at that time, according to Sheikh Iqbal, was "come up with industry!" Foreign exchange in this import substitution industry was saved by importing machinery (or sometimes fabricating copies in Pakistan) and bulk goods, then converting those goods into finished products. It was necessary to develop some sort of industrial base, and the government was willing to give whatever incentives were necessary, including land, water and tax holidays to the local entrepreneurs. As Sheikh Iqbal recalls:

> The people were very serious about industry; they were also very keen to go up with the industry and with the earnings of the business, and it is the personal efforts of all the people who have erected these factories--the pharmaceutical, the textiles, flour mills or whatever the country's need was. The people themselves are very hard workers. When they get the facility, they have shown their capabilities.

One major handicap to the industry at this time was the shortage of trained pharmacists. After a few years, a B.A. in Pharmacy program was finally established at King Edward Medical College and a department of Pharmacy was instituted at Punjab University, which relieved the situation somewhat.

Sheikh Iqbal sent his younger brother to college where he graduated with a degree in chemistry and a diploma in pharmacy. Sheikh Iqbal feels that the company had an easier time than previously after his brother qualified as a pharmacist because a member of the family now knew the technical details of the trade.

The companies which were established in this era were primarily family-run concerns, and they remain so today. The successful entrepreneurs were those who had a desire to enter any industry, secure a profit and reinvest it. These men were inexperienced in the pharmaceutical field, but that was irrelevant at the time. The important thing is that they knew how to make business deals with their own government representatives and with foreign firms, a skill learned through earlier trading experiences. The progress of this group will be charted as each successive stage is discussed. Their unique background was a basis for success during this period; later entrants required a different dynamic.

The second stage: before Ayub's programs

Rather than having entered the industry due to their business acumen, the incentives which drove the second group of entrants into the pharmaceutical field just after the Korean war boom were of a different nature. These men were prompted into the industry by their knowledge and experience, which was acquired during the ascendancy of the first group. Their entry is far more salient for our analysis than that of the first group, for this was the first time when entrepreneurs had to make some fundamental break with their past. The first group of men were traders who had eased into the field almost by accident; the second instead left more traditional backgrounds for the modern sector, having substantial knowledge of allopathy before starting their own manufacturing units.

Throughout the 1950s, many new units were set up although little basic manufacturing was yet to be initiated. The government had proposed a publicly-owned penicillin factory at Daud Dhel, though this was not to be completed until 1965. At the same time, large transnational pharmaceutical companies made inroads into the country and dominated the industry by the end of the decade. The entrepreneur who emerged in this second stage was better prepared to handle the technical details which the industry demanded, generally having a strong background due either to education or experience.

Rather than simply fate guiding their hand into entering this field, the men in this second stage had made deliberate choices. Arains, the historically mercantile rural qaum, tended to be dominant in this group again, with the more urban-oriented Sheikhs visibly absent. In other words, these people were not traders who entered this industry by chance, but rather came from *zamindari* [rural landowning] backgrounds, often not far from Lahore, and despite there being no particularly strong external incentives to enter the industry at this time, they did so due to specific, personal reasons.

Foreign corporations had enthusiastically promoted the first group's development through joint ventures and manufacturing license agreements; they did not necessarily extend themselves to these newer units. Though the benevolence on the part of foreign companies waned by the mid-1950s, the role of benefactor was soon taken over by Ayub Khan's government.

An illustration of the circumstances from which the second stage of companies arose is seen in the history of Star Laboratories, Ltd.

After graduating with a B.Sc. in 1958, Star Laboratories' founder Iqbal Hussain Malik rented a small building in Moghulpura. He ob-

tained a tablet machine, a centrifugal machine, some stainless steel and "a few blessings." The first items which he and his five employees manufactured were iron sulfate and ferrous sulficiate. Malik and an old friend in his employ would leave Lahore on Saturday nights for Gujranwala, sell their products on Sunday in Gujranwala, Wazirabad, Lala Musa, Kharian, and Jhelum, and then return to Lahore in time for work Monday mornings, having earned nearly ten thousand rupees in sales. The production would resume during the week and be sold the following weekend in the same manner.

Though his family were zamindars from Lahore district (for the last 500-600 years), Malik had always been attracted to the sciences, and had wanted to become involved in a business where he could do something with his hands as well. A close friend, a pharmacist, advised him while he was setting up his company. Both men were very concerned that Pakistan was importing virtually all pharmaceutical goods, goods which could be locally made if basic manufacturing was just given the opportunity. The foreign companies had promised that they would begin basic manufacturing as soon as possible, but had not yet done so.

The first major contract which Star Laboratories received was from the Pakistan army for sodium biphosphate, used in condensing milk. As he remembers the incident:

> They contacted me, I made it, and I gave them samples. They approved it and then we manufactured it. I and one of my friends, we both worked for nights to manufacture that item for fifteen thousand rupees. We worked and supplied that item to the army, until they were able to get it imported again! The same quality, the same thing! After that, though our product was of equal quality, there was no demand.

It was only after the Ayub government inaugurated several new policies after 1964 that his business was able to become more productive.

Another company begun in 1959 was Dawn Laboratories. Set up by two brothers, one had previous experience working for other pharmaceutical companies, while the second had entered pharmaceutical college in 1953 with the intent that upon graduation, they would establish their own business. They began in an industrial area in Lahore, shifting to Sheikhupura Road in 1969. Initially they processed and packed simple local raw materials, then began to import in 1965, and then later started their own manufacturing. They began

with seven workers, were able to build themselves up to thirty-five in the early 197Os, but employed only eighteen people in the early 1980s.

A pharmacist began Universal Chemical Laboratories in 1954 after he had worked for another local pharmaceutical company for six years. His family had migrated from Amritsar in 1947. He began his own company because he disliked the "bad, immoral business practices" which he saw in other companies at the time, evident in his opinions regarding the manufacture of the following two items:

> *Sulpha drugs*: companies were using the argument that sulpha, which kills the germs in one's system, is very harmful for the patient in the long-run; they were using less expensive substitutes, such as calcium carbonate and kaolin (which takes out the germs from the system, but doesn't kill them), but marketing them as sulpha drugs;
>
> *Alcohol tinctures*: some companies were using forty barrels a month in production (his only used nine barrels a year); they were making bootleg alcohol with this tincture, a very common practice at that time.

This company never grew very large, and was unable to get its license renewed after the 1976 Drugs Act, and was eventually permanently closed down.

Among companies which began in this stage, there appear to be a few characteristics which are strikingly different from companies commencing just after Partition. During this period of time, the first group of companies were prospering under foreign contracts and constructing new buildings for their factories. Most machinery and equipment were being imported; in one case, an entire plant was shipped from abroad. Though not becoming self-sufficient, they did save foreign exchange by nearly fifty per cent by importing raw materials and then packing them in Pakistan. The government was encouraging their expansion although import licenses were difficult to come by. The earlier companies, in general, had the advantage in this respect due to their now-established reputations as well as the contacts which they had already been able to build up. But the motivations of the two groups are noticeably different. The orientation of the first, who generally had trading backgrounds, was to make a profit in any industry; social relationships were irrelevant. But the

second group wanted more than that: somehow, they embraced the belief that it was important for allopathic medicine to be readily available in their country, and prepared themselves for the profession accordingly. Though the profit motive is still evident, the underlying "ethic"--and its implications for capitalist relations--is different. It is really in this second group, who were not traders, that the early stages of social transformation become apparent. These people became industrialists because that was the "modern" version of the role traditionally played by the pansari. There was a social purpose behind their entering into this industry, besides the economic one. The key to our question "but why industry . . . why this one in particular?" may best be found in the motivations and goals of this second stage of entrepreneurs, in their very conscious decisions to enter this field.

Until this point, nearly all factories were family-owned concerns with brothers, wives and cousins listed as directors, a common practice in joint family cultures. Even the largest companies were organized along these lines, and tend to remain so today with sons succeeding fathers. Though family background remained a significant factor in entrepreneurial expansion, this was not to remain the case during the next stage which witnessed a substantial expansion of the industry under Ayub Khan.

The third stage: expansion of industry

This decade, from the early 1960s through the early 1970s, saw the largest expansion in the industry with the number of indigenous companies nearly doubling. The Ayub government ostensibly set out to create a modern, standardized healthcare industry. The government estimated that there were 180 manufacturing units in the country in 1965 (including about two dozen foreign firms) which were able to meet about four-fifths of the country's pharmaceutical needs. Towards this end, the Basic Democracy units were to organize local agencies to promote community participation and awareness in public health, such as being responsible for water supplies, sewage disposal, family planning and stopping food adulteration, while the federal government retained full control over the standardization of pharmaceuticals. The Director General of Health (1968:100) reported that after 1960, the government assisted the development of the pharmaceutical industry by granting import licenses:

> for the import of raw and packing materials to work at full capacity. To protect the local pharmaceutical industry against unhealthy competition offered by manufacturers abroad, the Government banned the import of a large number of drugs and medicines for which equally effective substitutes were available at reasonable prices and in abundant quantity through local manufacturers. Similarly, the Government restricted import of a large number of drugs and medicines for which equally effective substitutes were available through local manufacturers but the quantities were not enough to meet the requirements of the country. . . .
>
> Some of these [foreign] manufacturers are also engaged in the basic manufacture of pharmaceuticals. Chloramphenicol, ephedrine, aspirin, liver extracts, vitamin B-12, meptobamate and a few other pharmaceutical chemicals are being basically manufactured in the country.

The government had also hoped to build up an export market, but this attempt has remained largely unsuccessful.

Perhaps the Ayub government's most substantial act regarding this industry amending the 1940 Drugs Act in 1963. This facilitated effective enforcement, including the ability to assign penalties for substandard drug manufacturing. Now a license was required for "the import of any kind of drug . . . similarly a Drugs Export License is also necessary now for the export of any kind of drug".[13] The Director General of Health (1968:100) renewed his government's avowed pledge:

> to make drugs and medicines of standard quality available in abundant quantity at prices within the reach of the common man.

The government liberalized their import policies, placing many raw materials and finished pharmaceutical products on the Free Importation List in 1964. This enabled local traders and industrialists to simply import goods and repackage them without having to go to the trouble of manufacturing them. Approximately Rs. 5 crore ($10 million) had been spent on pharmaceutical imports in 1959; by 1964, that figure had increased to Rs. 14 crore. Though a license was

now needed for importing, no duty had to be paid. The foreign pharmaceutical companies were a powerful influence in effecting this policy since they could now have their subsidiaries simply import finished goods from the parent company abroad. This practice, however, opened up the field to corruption and embezzlement. Although the government claimed at the time that this policy helped reduce the prices of imported medicines, over-pricing remained rampant vis-a-vis the prevailing international rates, and the government was unable--or unwilling--to curtail it. One industrialist in Lahore recalls his experiences during this time:

> In 1964, I got the first import license. But beforehand, I used to purchase certain imported items which I needed for manufacturing from the black market for two hundred per cent higher . . . it had become harder [after 1954] to get things like import licenses, because, in my opinion, they wanted to serve certain vested interests and people, not a common industrialist. They wanted that the "Large Khandans" [22 Families] would set up certain industries, or certain big people who have been landlords, they will be the designated parties. . . ,

With the new policies, it was now possible to have limitless imports. Years later, a U.S. Subcommittee on Monopoly revealed that American firms' rates in Pakistan, through their subsidiaries, were up to eight thousand times higher than U.S. or world market prices due to over-invoicing.[14]

Throughout the middle and late 1960s, the government distributed designedly generous import licenses. Successful established units such as LCPW and PDH were able to import the latest machinery available which gave them the capability of manufacturing intravenous transfusion solutions, injectables, bubble packaging, etc. At this time, LCPW entered into some new contracts and continued manufacturing on behalf of foreign companies including Bristol Myers, Sterling, Winthrop and Zyne. Mumtaz Ahmad Sheikh's sons and nephews were studying abroad in pursuit of advanced degrees in Pharmacy and Business Administration, with the intention of eventually working in the family firm. This is interesting in that the majority of Pakistani students studying abroad at this time were in the fields of medicine (to become doctors) or in engineering. Though they could have entered any field at that time, his sons chose to continue in the family concern.

Sheikh Iqbal of PDH, regarding the prosperity which Ayub Khan's generous import policies brought to the pharmaceutical industry, relates an analogy which a friend had used when recalling those years:

> During President Ayub's regime, a man who was lying on the bed, he got up and sat on the bed. The man who was sitting on the bed, he stood up. The man who was standing, he starts moving. The man who was moving got a cycle. The man who had a cycle got a scooter. The man who already had a scooter got a car. The man who had a car got an airplane. So this was the progress in that period: everybody was moving, doing something, developing. The people were putting money in the industry.

Another firm from this first group, Maqi Industries, began to expand their castor oil exporting to Turkey and collaborated on some tablets and syrups with an Italian company, Bagini Pharmaceuticals. The company tried to expand but were frustrated in their attempts to get permission to move their factory which was near Shalimar Gardens to the industrial area of Kot Lakhpat. The son of the founder, Mian Rhazes Maqsud, joined his father's business in 1968 after earning a B.S. in Pharmacy at Forman Christian College in Lahore. His younger brother and sister were also directors of the company.

Maqsud did agree that there was a favorable climate towards business during the Ayub era, but also pointed out how individuals still created the sorts of problems which can exist at any time. For example, there was the time when a government official from the Industries Department wanted to become a shareholder in Maqi Industries before giving them permission for something, and their hesitation to approach their bankers with an honest assessment of the company's needs. Within the industry, many people claimed that inflated demands often had to be given just to obtain one's requirements from banks.

At the time he joined the company, it employed about thirty workers. Schooled in western orientations towards factory organization, Maqsud maintained no semblance of a traditional relationship with his workers. Due to the labor problems which followed in the next decade of the 1970s, Maqi Industries became highly mechanized and was able to cut its workforce by two-thirds.

Many new entrants came into the pharmaceutical industry, as noted earlier, during this period. The backgrounds of these men varied greatly: the "western" business ethic appears to be more important than any other factor. Even clothes highlight this difference in orientation, for while the traditional shalwar kameez was often worn by the earlier groups of industrialists, this group wore western pants and shirts almost exclusively. Qaum background was now inconsequential; economic motives were primary. Perhaps this was an unforeseen outcome of the pressure exerted in Pakistan at this time by foreign governments, corporations and money-lending institutions, all of whom were invited by the government to aid in the country's growth. It appears that there may be a similar relationship here between the new entrepreneurial orientations and those of the international elite as there was in the 19th century when the colonized adopted the ways of their colonial rulers.[15]

Generally, unless the factory had been previously operating, entrants in this group did not have as profitable an experience as the former two groups'. Even though they began during a time of prosperity, these men from trading or government service backgrounds were generally unable to expand rapidly enough before the Bhutto government imposed the Generic Names Act in 1971. The Ayub government had been helpful towards these new companies in the same manner as it was towards the older ones. However, no special incentives were given to people who wanted to start new companies, a policy which served to dissuade newcomers. Akhtar Hussain Bhutta of Nawabson's Laboratories, who began his company in 1968 with a B.S. in Pharmacy and nine years of service working as a pharmacist for various companies, including Fazal Din (the parent company of LCPW), bemoans his fate of entering late:

> All the development of industry in Pakistan was before 1968. I got only a three year period for development! In 1968 and afterwards, there was great confusion between labor and industry. No one was satisfied. The political stability, especially for industries, is important. After 1968, there were three periods: during Yahya's, we had a war with India and we lost a part of Pakistan; after that, Mr. Bhutto came into power and he first wanted to introduce the Generic Scheme--for three years we worked for that; then he reversed that in his own period with the 1976 Drugs Act. What could be done?

Nawabson's has never managed to enlarge itself to the point of being competitive with the first group of companies, nor have most of the other units from this period. These include Malikson's Laboratories, whose owner, Shabir Ahmad, came from a Lahori trading family. Malikson's had produced sulpha drugs, distilled water and cough syrups, employing about twenty people. Ahmad began the company out of interest in a drug store which some relatives had owned. He had hoped to build up the business gradually but was unable to raise the five thousand rupees necessary as security to the government for every different compound the company wanted to manufacture. Not getting any assistance from the Small Industries Corporation, Ahmad closed the company down completely and permanently in 1975.

Another company, Dosaco Laboratories, had been able to enlarge somewhat since Ferdoz Bhutto helped start it in 1964 with his brother. Just prior to the 1971 elections, they shifted the company's production facilities to Sheikhupura Road, the industrial area on the outskirts of Lahore. They still maintain a sales depot by Lohari gate. Although their business was severely weakened by the 1976 Drugs Act, they have been able to recover somewhat.

This group tended to be more heterogeneous in their motivations, ideology towards business, and backgrounds than either of the first two groups. As noted above, few of these companies were able to become very successful, though there are exceptions. One of these exceptions, the Irza Pharma Company, has a history well worth highlighting, for in the background and life of its owner, Shahid Ali Jawa, can be found motivations for entering this industry within the indigenous cultural context. Parenthetically, it is worth noting that Shahid Ali Jawa is the only Shi'a Muslim of record involved in this industry.

His ancestors were first Hindus, then became Agha Khannis. Sometime later, some became Sunnis and some became Shi'as. As he describes his family's background:

> After that, I don't know from where the Jawas began or what is the link with the word Jawa. . . . As far as I remember, my age now is forty-three. Our father's father's name was Mohammad Bosta. My father's name is Mubarik Ali Jawa. Our father was born in District Sialkot in Narowal. We used to be told that our paternal grandmother was a very rich woman. She also owned a village, which was later sold by our father. Our father, during his young age, walked to

> Lahore from Narowal. He came to Lahore and did physical labor. First, during his youth, he put in a lot of hard, physical labor and in different places tried to run his shops.

Already two important features of his background are known. The first is that the family was once fairly wealthy but lost that wealth two generations ago. The memory of that wealth is still in the family's recent history, though the fact that his father had to walk to Lahore and then do physical labor shows that the family's fortunes had indeed changed. Second, and in this case perhaps less importantly, the family is from a minority group, the Shi'as. Shi'as have been discriminated against in certain areas, though not to the extent that Parsis or other non-Muslim groups who entered trading have been.

After one of Mubarik Ali Jawa's brothers died in 1936, Mubarik Ali took over the family's shop near Akbari Mandi, a market between Akbari and Delhi Gates inside the walled city of Lahore. He also established a business in Srinagar (Kashmir), borrowing heavily from friends in the process. He sold chillies, walnuts and dried fruits from Srinagar in the Lahore shop, and began to make some profits. However, when Srinagar was ceded to India at Independence, his business was devastated. Being heavily in debt, he essentially had to begin all over again, selling salt, pepper, flour, and other dry goods in his Akbari Mandi shop. In addition, he sold crude materials for unani medicines to hakims. The family's economic position became so weak that Shahid Ali Jawa's oldest brother had to take a manual labor job with the railway.

Akbari Mandi is near to the commercial center at Shah Alami Gate, where business had been dominated by Hindus prior to Partition. In late 1947, looting and plundering became the only business in the muhalla after the area was destroyed by fires. Another of Shahid Ali's older brothers bought goods from the plunderers and put them up for sale in the family shop, thereby adding to the family's income during this very difficult period. Shahid Ali Jawa was then ten years old. He had been in the third grade when a strike in the schools (a result of the exigencies of Partition) caused them to shut down. Due to his family's poor financial condition, he began to sell newspapers, *chana dal* [chick-peas] and *sui dhaga* [needles and threads]. He descriptively recalls his initial involvement in entrepreneurship:

> There was the railway workshop, where the laborers go off duty. During the day, I would sell newspapers, and in the evening, I would bring my *chabri* [large, flattish bowl] and sit and call "*sui dhaga, sui dhaga, button le lo*!" [Needles and thread, needles and thread, buy buttons!] When our conditions began to improve, then I began to sit in front of our shop selling *bane chole* [baked chick-peas].

Shahid Ali worked in the shop at Akbari Mandi with his father and an older brother until 1952 when his father decided to go for *haj*. Returning three months later, Mubarik Ali Jawa realized that his sons could manage the shop without him and left all the responsibility for it to them, only coming to the shop to sit for an hour or two each day. Shahid Ali says the reason that he and his brother were able to manage the shop themselves was that:

> I was very interested in working. I have always felt like competing with my elder brother in work so that I may build up my position. There was a natural sense of competition and achievement.

In 1952, the government introduced a category system for imports. The oldest brother, who was working at the railway workshop, managed to get an import license from the government to import crude drugs. He joined a cooperative society in Lahore, whose members collected two or three thousand rupees each to help import pharmaceuticals under the license. Cooperative societies based around import licenses such as this one were becoming popular throughout Lahore at this time. However, because of his new involvement with the cooperative society, this brother was unable to work at the shop anymore and the family had to work extra hard just to survive:

> Now my father, elder brother and I were running the family's shop. Father would supervise and we would run it. My elder brother and I worked day and night then. But believe me, when I look back at those days, I am startled and can't believe I worked that hard . . . I would carry bushels weighing three *maunds* [approximately six hundred pounds] on my shoulders and work as a loader with trucks. After that period of time, then we were heading towards success.

Through the urging of one of his brothers, Shahid Ali joined a body-building club in Lahore. He regards this as the turning point in his life, for although he had little education (he usually speaks in Punjabi, although he knows some Urdu, though no English), the rest of the club members were in college. By competing in body-building with the other club members, he feels that he came into contact with a certain type of society which gave him the determination to build himself up too, both socially and financially. His friends taught him "the ropes" about business, and, he believes, favored him in business deals later on. He feels that without these contacts, the probability is that a person from his background, despite being very hard-working, would have remained only a shopkeeper. However, though uneducated, the combination of entrepreneurial determination, adoption of a new peer group, and the opportunity to enter the pharmaceutical field--as well as government policies favorable at this time towards industry in general--served Shahid Ali Jawa well. He recalls the psychological effects of his friends on his own growth:

> During this time, the society I was in was leading me into my future, to develop my economic strength, my status in society, etc. Because of the company of these literate people, I would look like a literate person, because I would do whatever I saw them do. But if I were to sit in with illiterate people, I would do the same as them or what they did.

He expanded his trading area to include Peshawar, where he bought mercury and other goods which had somehow made their way to the border there. He traveled between Karachi, Hyderabad, Lahore and Peshawar, taking orders, buying goods, and strengthening his business ties. During this time, a friend working with a chemical company introduced him to the "foreign exchange business" which eventually enabled him to be able to conduct his own accounts with the Chartered Bank. After his third child's birth, he decided to give up the traveling aspect of the business in favor of importing and exporting. Through friends in both the Chartered Bank and Habib Bank (friendships made earlier through the athletic club), he was able to easily secure an OGL license. Although he did not know how to open a Letter of Credit account, another friend from the club working at Habib Bank helped him establish one.[16] These early friendships helped him establish his business, as he recalls:

> Then my business grew to such an extent that I had a lot of money and I had established a very vast business in the market on my own. Now my father and brother would manage the shop and the dealing with traders and shopkeepers in the market and I would take care of banking, imports/exports, customs, and maintain my relations with the people working in these related offices. . . . At this point, my position became so strong in Habib Bank, where I had opened an LC account, that even the seths [people with much wealth] began to become my friends. Even the director of that bank became my friend and came to my shop to have tea and attend a meeting. All the big traders in the market joined us in Habib Bank. So all that hard work that we had put in the previous years came to our help and we are still benefitting from that till this day.

Since 1958, Shahid Ali was importing stocks of raw materials for the pharmaceutical industry using the import licenses which he had purchased from a friend under the Bonus Import Scheme. He had decided to import these raw materials since they were similar to those used in unani with which he was somewhat familiar from his shop. He recognized that "the basics for crude medicine are the same for unani and pharmaceuticals," the latter being the extracts from crude drugs. He was selling raw materials such as glycerol extract, belladonna extract, cocoa powder, and other spices largely to indigenous pharmaceutical companies such as Universal Chemicals and Star Laboratories, and occasionally to foreign firms. He sold local and imported goods to both unani hakims and pharmaceutical manufacturers throughout the 1960s.

After the PPP government put an end to the Bonus Scheme in 1972 and allowed for free imports, Shahid Ali Jawa lost a lot of money which he had invested in importation licenses. It was then that he and his brothers began thinking about setting up their own manufacturing company. Shahid Ali's nephew went to Punjab University with the intention of earning a B.S. in Pharmacy so that he could help out in the business. The family was going to begin by manufacturing mercury salts, which are used widely in unani medicine. However, those plans were dissipated when, after his mother's death, Shahid Ali and his brother (whose son had by then completed his Pharmacy degree) became involved in family disputes and broke off economic relations. While establishing a pharmaceuti-

cal manufacturing unit would have been a judicial business decision, all plans were canceled and ties were broken because of an unassociated family matter.

Aware of increasing expenses, Shahid Ali decided that it was still expedient to enter into manufacturing industry, though it was difficult to establish a company without his equally experienced brother. In 1972, instead of beginning his own firm, he became a quasi-partner in Irza Pharma, purchasing the physical factory (including the building, land, and gas/water/electrical connections) from its debt-ridden owners for Rs. 112,000. Irza Pharma had first opened in 1952 as Indus Pharmaceuticals and merged into Irza Pharma in 1968. When Shahid Ali purchased the company, it employed fifty workers; by 1980 it employed about seventy.

Three years later, his partners were still unsuccessful with Irza Pharma. In May 1975, just before the Drug Enforcement Act, he purchased the remainder of the unit including the machinery, raw materials and bank liabilities. When he took over the factory, he had three goals:

- -- Not to manufacture any commodity at a substandard level (such as substituting saccharine and water in place of sugar);
- -- To gain goodwill relations first, after which profits would naturally follow;
- -- The unit should help meet the medicinal requirements of the country.

Though he was able to build up his company, he felt frustrated in his attempts not so much by the industry regulations which the Bhutto government came to enact, but rather by the labor policies which created much unrest in his factory's union.

The Bhutto era: attempts at controls

By 1971, when Zulfiqar Ali Bhutto came to power, there were over two hundred pharmaceutical manufacturing units in Pakistan. Nearly all of the world's leading transnational pharmaceutical manufacturers were also operating factories there. Local production units (though not necessarily locally-owned) were meeting about 80% of the domestic requirements, worth nearly Rs. 35 crore. A decade earlier, this worth had been only Rs. 5 crore.

During this time, the government attempted to control the inequalities which had developed during Ayub's period though its mo-

tives are seen as problematic. Few new businesses were begun during this time and many older ones collapsed due to three policies of the government which had substantial impact on this industry. The most pervasive policy was the government's attempt at regulating the quality of pharmaceutical production, carried out first by the Generic Names Act in 1972 and later by the Drugs Act of 1976. The other two policies of note here concern the power given to unions during this time and the exporting of skilled and semi-skilled laborers to the Gulf region.

The Generic Names Ordinance was introduced on April 20, 1972, with the hope of making a better quality, less expensive supply of medicine available in the country. The government admitted that despite its former policies:

> the prices of essential and good quality medicines are so high that they are virtually beyond the reach of the common man . . . in Pakistan, 75% of persons cannot purchase the medicines they stand in need of.[17]

As of September 30, 1972 (later extended to March 31, 1973), brand names were no longer to be used on drugs and medicines. Instead, all production was to be in conformity with standard "recipes" and all goods were to be sold only under their generic name.[18] This Act is generally perceived as having been beneficial for the industry though the government did not adequately implement it. For example, only twenty-seven additional drug inspectors were appointed to enforce the new law in the Punjab. The restrictions were only relevant to the spheres where the laws applied (mainly production), and could have no impact on other crucial dimensions of the industry such as import/export, distribution and storage.

Though the government's professed motivations for implementing the Generic Act were to make quality drugs easily available, members of the indigenous industry sometimes disagree that this was the case. One industrialist, explaining how the law came about, claims that Sheikh Rashid, who became Health Minister in 1971 and initiated the Act, once contested an election in Kasur against Sheikh Iqbal of PDH. Sheikh Iqbal had spent a lot of money in the election. Sheikh Rashid then claimed that an overabundance of profits was being made in the pharmaceutical industry which must be due to the local companies filling "water in place of chemicals in injection ampules." Though this report is not substantiated in any government documents, Sheikh Rashid's first major act after be-

coming Health Minister was the introduction of the Generic Names Act.

There were suspicions that the foreign firms were behind the act, that they assumed the indigenous companies would be unable to conform and therefore would have to close down. After the Act was implemented, most local firms did close for 3-12 months, but eventually most had no problem in compliance. No foreign firms' operations were ever shut down due to this Act. The only foreign firm known to be investigated under this Act was the Boots Company, based in Karachi, though it appears that no further measures were ever taken against them.[19]

Many people had thought that the Generic Act would have widespread consequences since it urged conformity at the market level. However, it turned out to be relatively innocuous. The Act was limited as it only applied to drug preparation and labeling, and there were many ways to side-step the Act. One Punjabi industrialist analyzes the effects of the Act by pointing out that:

> Actually, if the Generic Scheme was enforced for good intentions, it would have been very good for our country, because all the foreign firms and other big firms had been changing the names of their products and selling a thing for ten rupees that was actually worth two rupees. It was profitable for small companies, especially for manufacturers like us.

People question the government's intentions in implementing the Generic Act, for only three years later, it completely revamped the way the industry was regulated with the introduction of the Drugs Act. Yet industry members also acknowledge that all of the 303 known units in the Punjab in 1974 could not each have been producing standard medicines.[20]

Therefore, the Bhutto government moved towards taking a second decisive step towards standardizing the pharmaceutical industry, and on May 11, 1976 it issued the Drugs Act of 1976. The preamble to the Act states that it is "an act to regulate the import, export, manufacture, storage, distribution and sale of drugs," and was a complete revision of the 1940 Drugs Act.[21] Every company was now required to apply to the government for licenses and to separately register each item they intended to produce.

No company was exempt, though larger ones generally had an easier time in acquiring permission than smaller ones. The government wanted control of output, thereby avoiding a glut of the more

profitable drugs on the market and the absence of others. The pervasive measures outlined in the Drugs Act caused every indigenous pharmaceutical company to close down for a period of time (usually a year), though it appears that once again, foreign transnational firms manufacturing in Pakistan did not have their operations interrupted and rapidly got their licenses renewed.

The 1976 Drugs Act was based on World Health Organization recommendations. It was implemented in Pakistan far quicker--nearly overnight--than it had been in many European and most Third World countries which had enforced it in successive stages, during a period of two to three years.

The Drugs Act proved to be one of the most controversial laws ever passed in Pakistan. The largest manufacturing firms heralded it for its timely passage so as to monitor the industry while the smaller firms decried it as basically conspiratorial. The Act (Khan,1979:12) states that:

> a person applying for the registration of a drug shall furnish such information in respect of the drug as may be prescribed, including information relating to its efficacy, safety and quality. . . .[22]

The Central Licensing Board was designated as the sole body to determine the allocation of licenses to manufacturers, while the Registration Board was responsible for granting permission for the manufacture of particular items. On paper, it appears that a manufacturer only had to thoroughly describe the item he wished to produce, and then permission would be granted. In practice, this did not occur. Instead, companies often waited years just to be notified of the Registration Board's decision, often to find out that their requests had been denied.

An example of this can be seen in the experience of Dawn Laboratories, a company set up by two brothers (one a pharmacist) in 1959 and which relocated out on Sheikhupura Road in 1969. On February 24, 1976, they submitted a number of applications for licenses to manufacture certain items which they had been producing prior to the 1976 Act. On August 9, 1979, three and a half years later, they received the following terse response rejecting their applications:

1. *Codeine cough syrup*: Substitutes with better efficiency and safety already available in adequate quantities to meet the medical needs.

2. *Tetracycline syrup*: Adequate quantity of this drug available from other sources is sufficient to meet the medical needs, and therefore it is not in the public interest to register this.
3. *Tetracycline powder*: Adequate quantity of this drug available from other sources is sufficient to meet the medical needs, and therefore it is not in the public interest to register this.

What didn't make sense to Dawn Laboratories' owners was why some firms were given permission and others were not concerning the manufacture of the same items. They had applied for their licenses at the same time as others, but their application was rejected because enough permission had already been given to other companies. The industry, however, was neither nationalized nor subsidized to warrant this sort of discrimination. One industrialist believes that the basic problem was that the government moved too quickly once again in setting up the system, thereby creating a bureaucracy plagued by haphazard decisions. Another industrialist also questioned the rapidity with which the Act was passed. He pointed out that his company had been operating for over two decades, and in 1968 had signed a collaboration agreement with an Italian firm to produce milad tablets (for stomach ulcers). He disagrees with the contention that the Drugs Act helped standardize the industry, and says:

> When they [the foreign firm] decided to join us in 1968, before this Act, we had a good standard. That's why this foreign firm joined us. They have a good standard there. So simply to say that only the Drugs Act of 1976 had a great impact on the modernization of the pharmaceutical industry, I don't agree with this.

While waiting to receive its licenses, the company had to shut down completely for nine months. Their complaint was that if a foreign firm, known for its high standards, chose to collaborate with them in Pakistan, on what grounds could the government claim they were manufacturing substandard drugs? In fact, that reason was rarely used when denying licenses. The point was usually transmitted, though phrased differently, such as saying that the product was already in sufficient supply (as in the case of Dawn Laboratories) or that the area that the factory was in was too congested with traffic

and dust. An added complication to the factory closings was that the government had made no financial provisions or arrangements with the nationalized banks regarding any outstanding loans which these firms might have had. Loans were increasing due to interest charges, and when the renewal licenses were finally granted, many companies found themselves without any finances and nearly bankrupt.

One former factory owner bitterly questioned the validity behind the government's responses. His laboratory in Ichhra, an industrial area of Lahore, was closed after the 1976 Drugs Act, was never able to get any of its licenses renewed, and has been shut down ever since. He questioned:

> How come my factory, in a remote area of Ichhra, did not win approval, when PDH, on Nicholson Road [a busy commercial area], did? They said that my factory was in an area that was too congested . . , and Nicholson Road isn't?

In many instances, the physical building or the location were the reasons given for denial of a license. Frustrated factory owners questioned why the government could not give them an interim license, perhaps for a two-year period, in which time they would have to improve upon the building or shift the location. Without operating, most companies could not raise the necessary funds for these capital improvements. Many industrialists suggested that a gradual process would have been welcomed as inevitable; occurring overnight, however, forced many of them to permanently close down.

Other manufacturers berated the government's apparent policy of favoring the foreign manufacturers. They felt that Pakistani consumers were becoming more educated and realized that under the Generic Act, the quality of a local firm's product would be no different from that of a foreign firm's, but that simply the price of the former was less. For example, Maqi Industries was selling a 60 ml bottle of chlorophenicol syrup for about four rupees while Glaxo and Pfizer, two foreign firms operating within Pakistan, sold the same item for twelve rupees. The foreign firms claimed that the price disparity was due to their high overhead costs. However, it was later shown that many foreign units purchased their raw materials from their parent companies who were over-invoicing and overcharging their subsidiaries so as to funnel more profits into the headquarters. Some companies, again primarily foreign-based ones, often juggled figures related to raw material costs and marketing

expenses in determining the price structure for their goods (Salim, 1979:23).

Official government sources claimed that there were forty locally-owned pharmaceutical companies operating in Lahore and an additional twenty firms operating in other areas of the Punjab shortly after the implementation of the Drugs Act (there had been at least 303 manufacturing units in the Punjab prior to the Act).[23] Transnational corporations still control about two-thirds of this industry in Pakistan.[24]

Another factory owner asserted that the Drugs Act damaged people who wanted to work for it was based simply on the whim of the government bureaucrats responsible for registering the items. When questioned about the reasons given for not approving certain items after three years, he said that they gave absolutely no reasons:

> Just their whims. They will say that you do not have the production capacity. But I say that when there is no capacity, the machines are lying vacant. No work is going on. Then? They will possibly make this objection, because for each item, when we apply for registration, we attach along with it a five hundred rupee draft, deposited in the government treasury, for the government fees. Already fifteen thousand rupees are with them for the last two years, but they don't bother . . . they don't renew it [the license]. They should advise us in advance that we don't have the arrangements or the capacity. We people can work twenty-four hours a day!

He was concerned that his plant was only working at one-quarter capacity because of the delay in licensing. He had gone to see the Director General of Health in Islamabad in mid-1979 to discuss the twenty items which were still pending. Following that meeting, one more item, methionine (an amino acid used as a supplement to a high protein diet in the prevention and treatment of certain liver diseases), was approved. Again, no reasons were given as to why the remaining items were still pending. Since the company was manufacturing less, their income was less, and they were unable to increase their employees' wages by very much. This in turn agitated the unsatisfied, frustrated workers still further, creating an endless circle of obstructions in the growth of the business.

One of the indigenous industrialists pointed out that not only did foreign firms instantly have their licenses renewed, but in some

instances, as in the case of Lederle, they were able to get them revalidated on a temporary basis. However, no local company was ever granted a temporary license. A second industrialist gave another account of the virtual discrimination levied against indigenous firms in favor of the foreign ones in the issue of basic manufacturing:

> He [Dr Nasir] played real havoc with the industry. In the meetings, when we met with him, he said, "We'll give basic production to the local industry and we'll ask the foreigners to go into basic manufacturing." Since I was one of the basic producers, I told him, "Look, we Pakistani industries can manufacture basic raw materials also!" He said, "Yes, yes, don't worry, you'll see tomorrow, we'll do this and we'll do that. . . ." The next day after the local industrialists had this meeting with him, the headlines had it that all the licenses for basic production were given to the foreign nationals.

The foreign companies did provide over a crore of rupees in foreign exchange, a fact not to be overlooked. Yet when compared to the crushed potential of the indigenous industry, the national gains no longer seem as apparent.[25]

Perhaps the most outspoken criticism of the Drugs Act came from the Pakistan Chemists and Druggists Association. At their annual meeting in Karachi in October 1977, they passed the following resolution condemning the government's hasty action:

> The Drugs Act, 1976, has brought innumerable complications and hardships to the pharmaceutical trade and industry in Pakistan (particularly the national pharmaceutical industry and trade). As a result, they find it difficult to pull on their business smoothly, efficiently and honourably owing to various provisions in the Act being impractical, unreasonable, irrational and not consistent with the socioeconomic and administrative conditions prevailing in the country. This meeting, therefore, urges upon the government, to repeal the Drugs Act, 1976, and in its place, readopt and re-enforce the Drugs Act of 1940 (modified up to 1967) and the Drugs Rules of 1945,

> which in our opinion, suit the requirements of the country.[26]

The general consensus of the meeting was that the socioeconomic needs of the country had been ignored and that the administration was either unable or unwilling to process the various applications with any rapidity, and in general that:

> The authors of the Drugs Act, 1976, had tried to jump to the level of the advanced countries, resulting in that the trade and industry and, above all, the ailing masses, were put in trouble.

Other points which they mentioned included that fees for licenses had increased from one hundred and two hundred rupees to five thousand rupees for no apparent reason. They felt that the conditions for receiving licenses were now excessively harsh and rigid resulting in the cancellation of over two-thirds of all manufacturing licenses in the pharmaceutical industry. Because of this, thousands of skilled and unskilled workers lost their jobs. In addition, they felt that because the Act was limiting the manufacturing capacity of many firms, there would be an increased shortage of drugs in the country at prices the masses of the people could afford.

However, the Pakistan Pharmaceutical Manufacturers Association (PPMA), which is made up of directors of both foreign firms and the largest domestic ones, was noticeably quiet on this issue. Their only criticism was that the government enforced the Act too quickly.

Another hindrance which resulted from the Drugs Act was that now factory owners had to travel to the national capital, Islamabad, to get bureaucratic work accomplished. Previously, it had been sufficient just to go to the Secretariat office in Lahore. This new inconvenience can be compared to the situation which would exist in the United States if every factory owner had to go to Washington, D.C. to get government forms signed and permission to operate!

In sum, while attempting to regulate the pharmaceutical industry so as to secure quality products in sufficient supply, the government instead created a situation where production decreased and pharmaceuticals was suddenly a no-growth industry. Various factors have been suggested regarding the motivations which caused the government to take this sudden action, including economic and political issues as well as concern for hygiene, though the primary reason remains uncertain.

The above laws passed by the Bhutto government first under Sheikh Rashid and then by Dr Nasir, who replaced Rashid as the Minister of Health in 1976, had a strong impact on curtailing this industry's growth, yet such containment was not unparalleled in other fields. The government was resolute in its desire to offset the imbalance created in industry during Ayub's regime, when labor was unable to wield any formidable power. Towards these ends, a new labor law was passed, which encouraged the formation of unions (Bhutto himself would make speeches reaffirming labor's rights) and the government began to nationalize factories whose operations were deemed vital in the public interest.

In the pharmaceutical industry, deteriorating labor relations coupled with the Drugs Act proved devastating. In many instances, when a factory was finally able to reopen with a new license, disaffected unions shut it down--or in some cases, burned it down--shortly afterwards. Two or three unions operated in most factories, for membership was often based on political orientation. At the outset of the labor reforms, many industrialists resigned themselves to giving labor more power at the workplace and increased salaries. They hoped that with the increased rights, the workers would also develop an increased sense of commitment and responsibility towards their work, an outcome well-worth the additional costs. This transition failed to occur in most cases, and the workers in fact became worse off due to increased unemployment rates (smaller factories were not required to have unions or pay social security taxes) and the withdrawal of traditional compensations. These traditional compensations included bonuses given at the time of a marriage or birth of a child, which had become woven into the network of industrial relations as a holdover from more feudal times, when zamindars participated in these sorts of reciprocal activities.

Therefore, it can be seen that the soundness of the pharmaceutical industry was pierced by labor disruptions during the mid-197Os. Every company has some story to retell of how their workers rebelled and how their business--and the lives of their workers--was hurt. One industrialist commented that he feels that the labor reforms could have come about in a different way. They didn't have to encourage such violence, which was detrimental to both parties. His own opinion is that he feels that Bhutto encouraged the laborers to violence for a variety of political reasons and that the cost of his actions were ruinous for the indigenous pharmaceutical industry:

> It didn't help the industry, because now the reason that nobody is investing money is because of the la-

> bor problem. Everybody is going into trading, not to the industry, and the production is not coming up to the mark. You see, we cannot turn out any worker . . . if there is an unwilling worker who is not going to work, you've got to give him six, seven, eight months [salary] to get him to leave. . . . If there is peace in the factory, you can well imagine another 20-25% more workers will be employed.

Working conditions and pay scales of laborers in this industry became sharply improved during this period. The average monthly wages of a semi-skilled male rose from about two hundred rupees per month to about four hundred rupees.[27] It became difficult for factory owners to fire workers, even for such reasons as improper work or high absenteeism. The unions, one-fourth of whose leadership could be composed of men (or, in theory, women) from outside the factory, would threaten strikes and work stoppages over various issues. However, bribery and corruption were not unknown at this level of industry either, and many factory owners discovered that often, if they gave the in-house leaders a bit more pay, at least their more volatile statements could be curtailed. As one entrepreneur recounts:

> We usually purchased the labor leaders just to maintain the harmonious climate in the factory. We used to have to pay them more per month, just to give them that . . . er . . . understanding.

Investment in capital goods plummeted, as it did in most industries in the country. No one was willing to invest in a field where time is a factor in production. There are many products which, once begun, must be completed or else there will be a total loss. During 1974-77, strikes became so common that no factory owner could be certain that the production of a particular product could be completed in timely fashion. No one trusted each other: the workers regarded the entrepreneur as the epitome of evil and corruption, while the latter distrusted his workers and viewed any efforts towards improving his factory as futile.

The social welfare reforms consisted of five per cent of the laborer's pay being apportioned to the government as old age pension and seven per cent going to the government as social security. However, workers haven't benefitted much in practice from these programs as they are reluctant to apply for social security, preferring to

rely on the extended family in times of hardship. The same is true for other programs, with workers often returning to their ancestral villages or extended families rather than becoming dependents of the state. However, the various deductions are computed into the business's costs of production, so the worker fails to benefit from any side.

Concomitant with advocating the above labor reforms, the Bhutto government adopted another policy concerning labor, that of exporting large numbers of skilled and semi-skilled workers to the Gulf states. The direct effect of this policy was minimal in this industry. Qualified pharmacists were once again in short supply but there were no other shortages as in steel re-rolling, which requires a certain skill be learned over a long period of time. New laborers could always be recruited for mixing, packing and shipping pharmaceuticals. However, the impact of this policy of exporting laborers to the Gulf reverberated throughout Pakistani social and economic institutions. An indirect effect of it on the pharmaceutical industry, the increasing employment of women laborers in factories, has contributed to changing the make-up of the workforce and the politics at the workplace.

The Pharmaceutical Industry in the 1980s

Some industrialists had thought that the martial law regime of General Zia ul-Haq would bring back the prosperity and strictness of the Ayub era, but that was not to be. No new major industrial units emerged in the 1980s perhaps since the dynamic in the industry had shifted from the orientations of the entrepreneurs to the actions of the laborers. Prior to 1970, workers were often illiterate or had only some basic primary schooling. Since the mid-1970s, more laborers have been matriculates (tenth grade graduates) who can read and write both Urdu and English, enabling them to read instructions and follow filling and packaging directions without much supervision. However, no technical schools have been set up yet for this industry, as they have been established in Sialkot for the sporting goods industry and in Kasur for textile workers. Factory owners invariably remarked that they prefer to hire graduates. When pressed for reasons why, they noted that more people overall were now becoming educated and that "they should know that this label they are putting on is right or not!"

The workers also want their children to be educated and then placed in a good position, preferably in government service. They see many imported material goods around them and recognize that

their family can acquire such products and improve their position in one of two ways: either educate the children or go to the Gulf as laborers. The latter choice is fraught with contradictions, the desire for material gain versus the desire to remain with one's family. Clearly, if it could be possible to prosper in Pakistan, most Pakistani workers in the Gulf states would have remained at home. However, during the late 1970s and early 1980s, they went to Riyadh, Kuwait, and Abu Dhabi in record numbers, worked for about three years, and regarded that time as their contribution to their family's betterment. By the end of the 1980s, the flow of workers to the Gulf had subsided but still remained substantial.

An interesting change which has occurred in the industry during the 1980s concerns the increasing employment of women as factory laborers. This has come about as a means of ameliorating other contradictions which had surfaced in the society due to the exigencies of industrial development and the Bhutto years. It must be pointed out that employment of women in this industry is not yet widespread, with perhaps only a quarter of local units involved, but it appears to be a growing trend.[28] What is of significance to the observer of social change in Pakistan are the reconciliations between tradition and modernity which are made by women at the workplace, particularly how beliefs and necessities are adjusted to each other and the accommodations which are made to purdah.

Briefly, until the Bhutto era, it was unnecessary for women to enter the labor force due to the abundant supply of male laborers. Women also had little education, so were not viewed as potential employees.[29] Since then, lower middle class women have been hired in the pharmaceutical industry in Lahore as a response to deteriorating labor relations (women are considered easier to control and do not join unions);[30] the sudden absence of the dominant male (who had gone to work in the Gulf); increased literacy levels, which contributes to a "Western style" understanding of time and punctuality which they were socialized into learning while at school; and due to this increased education, women are putting off marriage for a few years and contributing to their own dowry which may have an impact on giving some women the power to at least decline an unwanted proposal.

A striking characteristic of the women interviewed who work in pharmaceutical factories is that most tend to be *purdah-nashin* [purdah observing]. These women always live with their families and prefer working conditions where purdah can be observed. Extremely close relations develop among women working together in their segregated area, similar to those which occur in the traditional zenana.

Relations with male factory workers are also integrated into a traditional pattern. Women avoid dealings with male workers as much as possible, but when they must encounter them, they do so without the veil. This is similar in practice to a woman's relation with a fairly close male cousin: while not in purdah from him, unless there is some reason which draws them together, they avoid one another.

There are many contradictions inherent in women's working in factories, though often they are resolved in a traditional manner. There is also a hesitancy on the part of some factory owners to hire women for they feel that, regardless of the reconciliations which can be made, the sexes should not intermix and if their factory did mix the sexes then it would not be respectable. Conflicts have also arisen between males and females on the issue of unions, for the unions realize that a major reason why factory owners hire women is because they tend not to participate in union activities.

Finally, it is worth noting that for all of the above reasons, factory owners tend to treat their women workers generally differently than their male workers. One factory owner actually arranged the marriages for three of his female employees. He had made the initial and subsequent contacts with the prospective bridegrooms' families. Many other industrialists pointed out that they feel a strong sense of responsibility towards women working in their factories. Most employers have paid for the weddings of their female workers, knowing full well that the woman would no longer continue to work for them. The patriarchal role is therefore still being played by these men in much the same manner that a zamindari family would play in a more traditional context.

The heightened attention given to Islamic laws and traditions by the Zia government has not produced any marked increase in interest in unani medicine. Rather, as Table IV.1 shows, consumption of allopathic medicines (and the value of these pharmaceuticals in million rupees) is estimated to be sharply rising:

The total value of allopathic pharmaceuticals jumped dramatically between 1977 and 1983; the Islamization program was introduced in 1979. Therefore, there does not seem to be a reversion back to preferring unani medicines over allopathic ones. The Seventh Five-Year Plan (Planning Commission, 1988:49) records that the pharmaceutical industry enjoyed a 4.5 per cent share in value added in all large-scale manufacturing in Pakistan in 1987-88; this share will decrease to 4.2 percent by 1992-93. By the end of the Seventh Plan period, the government estimates that pharmaceutical syrup production will enjoy an annual growth rate of

6.3 per cent while that of tablet production will enjoy an annual growth rate of 5.9 per cent (Planning Commission, 1988: 322).

Table IV.1

Value of Pharmaceuticals in Pakistan (in Rs. million)

		1975	1977	1983
1.	Chemotherapeutic agents (antibiotics, sulpha drugs, etc.)	160	193	372
2.	Vitamins	75	90	155
3.	Analgesics	65	78	135
4.	Cough preparations	45	54	94
5.	Antimalarials	40	43	85
6.	Haematinics	30	36	64
7.	Hormones	40	48	85
8.	Amoebiasis and antidiarrhoeals	25	30	53
9.	Metals & their salts	25	30	53
10.	Drugs for cardiovascular system	20	24	44
11.	Antiseptics & disinfectants	20	24	44
12.	Histamines & antihistamines	15	18	32
13.	Antisposmodics	15	18	32
14.	Antacids	15	18	32
15.	Hypnotics, sedatives, & tranquilizers	15	18	32
16.	Galenicals	10	12	22

Sheikh Iqbal of PDH claims that the exporting of labor to the Gulf was partially responsible for this positive growth:

> The money is coming from outside, and they who are living abroad, their life, their standard of living, has changed. They feel that medical aid is very important as they get hospital facilities and medical aid over there. Naturally, whenever they send money back here to their family, they are very particular about healthcare because they are accustomed to it. Also, the government is spending a lot of money on medical care. They are providing funds to open dispensaries and want free medical aid for government servants. There is an increasing need for medicines everywhere.

Though sales may be improving, innovation (research and development) is recognized as crucial if the industry can ever hope to become competitive in both their internal and external markets.

At the beginning of the decade, Shahid Ali Jawa assessed the fortunes of the industry both pragmatically yet optimistically:

> The present position is such that we are trying to maintain and produce our products in accordance to the laws of the World Health Organization. The main thoughts in our industry now are to run the factory. As far as research and development are concerned, for that, time and finances are needed. At the moment, we have more than enough instruments in our factory so that we are able to maintain the laws of the Drugs Act and of the W.H.O. We want to first establish our industry, and then to develop our share in the national and international market, we will have to go further into research and development.

Many industrialists in the 1980s were anxious to enter basic manufacturing but their speculations became ensnarled by government stringency. These industrialists at the least wanted to see production taken out of the hands of the foreign companies such as by banning the import of those products which were being manufactured in the country. As one man asserted:

> Our country cannot afford to import so much. If the government supports and encourages people to install new factories, then naturally they will. I'm not in favor of imports, and then do the manufacturing with them. We must have basic manufacturing!

In agreement with the need to import less and manufacture more, another factory manager saw the role played by the state as central to the problem of dependence:

> The need of this country, as in every developing economy, is to set up the industries. It is a pity that we are importing so much, because there are a lot of things which we can make here, and industry can only be here if the situation is congenial. . . . We should start manufacturing raw materials here, but everyone is hesitant because of the political situation.

Anxiety regarding political instability echoed throughout the industry, from entrepreneur and laborer alike. The future, however, is still viewed as precarious owing to fluctuations dependent on political change.

Notes

1. An excerpt of this chapter has appeared as "Medicine for the Masses: Development of the Pharmaceutical Industry in Pakistan" in *Journal of South Asian and Middle Eastern Studies* Vol. IX, No.1, Fall 1985:46-66.

2. This coincides with the phenomenon in most Third World countries that textile and food processing industries develop first.

3. For an elaboration of the role the government played in industrial progress during this period, see Gustav F.Papenek (1967).

4. Ralph Crozier (1970:277) elaborates on the differences between these medicinal systems and folk practices.

5. The Ayurveda (sometimes referred to as Atharva Veda) was the fourth book of the major vedic texts, following the Rgveda, Yajurveda and Samaveda. Latest in composition, it was the least Aryan in origin, most probably based on Dravidian culture. The most significant parts in it were the prescriptives for curing diseases.

6. This hadith, from the Sunni tradition, was reported by Abu Hurairah and transmitted by Bukhari.

7. Some sources claim that Captain Hawkins of the East India Company was able to cure Emperor Jehangir's daughter earlier, and it was he who received the permission to trade as a reward. However, this does not appear to be as well documented as the event with Shah Jehan.

8. O.P.Jaggi (1980) extensively covers the major European physicians and their impact on India. Another colorful account of western physicians in India is that of V. Jacquemont in 1831 and A. Soltykoff in 1842 in *The Punjab a Hundred Years Ago* (trans. and ed. by H. L. O.Garrett, 1935).

9. From personal conversations with Bernard S.Cohn (Department of History, University of Chicago) at Santa Cruz in 1981.

10. This weed, according to Latifi (1911:150-152), was once valued by physicians in Europe, but its popularity as a laxative was diminishing during his time.

11. For further information on the development of the Indian pharmaceutical industry, see B.S.Rao (1957:310-26).

12. David Gilmartin (1979) discusses the role which Arains have played in Pakistan's development.

13. Ministry of Health, Labour and Social Welfare, Government of Pakistan (1968:98).

14. The results of this investigation are reported in Sami Mustafa (1975:43). Gary Gereffi (1983) documents similar occurrences involving transnational pharmaceutical companies throughout the Third World.

15. The "colonial mentality" as described in Frantz Fanon (1965) and in Albert Memmi (1965) is what is referred to here.

16. It is an interesting coincidence that Habib Bank was owned and run by Shi'as (prior to Bhutto's nationalization of banks in 1971) and that Shahid Ali Jawa was also a Shi'a. Not that there was a policy on the part of the bank to favor Shi'a businessmen, but rather, an innate cohensiveness existed between members of the community, though to a lesser extent than that which existed between such groups as the Memons and Khojas in Karachi or the Marwaris in India.

17. Ministry of Health and Social Welfare (Health and Social Welfare Division), Government of Pakistan (1973:80).

18. For further discussion on WHO's recommendations towards implementing generic pharmaceutical policies in the Third World and some outcomes of these policies, refer to Surendra J.Patel (ed.) *Pharmaceuticals and Health in the Third World* (Oxford: Pergamon Press, 1981).

19. Health Division, Bio-statistics Section, Government of Pakistan (1974:73).

20. In 1979, long after the Generic Act had come and gone, the *Pakistan Times* carried an article condemning the Bhutto government's implementation of it. The author, A.R.Shibli (1979:9), showed how price increases averaged over 60%, excessive quantities of drugs were still being imported, and substandard drugs, using their generic names, were still being produced.

21. Preamble to the Drugs Act; the Act was dated May 11, 1976, and was published in the *Gazette of Pakistan, Extraordinary*, Part I, May 18, 1976.

22. This is from Chapter II, part 7, sub-part 7 of the 1976 Drugs Act.

23. Directorate of Industries and Mineral Development, Punjab (1975). Although the year of publication given is 1975, the book did not appear until 1979.

24. As far as can be ascertained, the 23 foreign-based pharmaceutical companies conducting business in Pakistan in 1980 were: Abbot Laboratories (Pak) Ltd.; Alcon Laboratories Int'l.; Armour Pharmaceutical Co., Ltd.; Aspro Nicholas (Pak) Ltd.; Bayer-Pharma Ltd.; Boehringer Mannheim; Bristol Meyers; Ciba-giegy (Pak) Ltd.; Fisons (Pak) Ltd.; Glaxo Laboratories (Pak) Ltd.; Hoechst (Pak) Ltd.; Imperial Chemical Industries (Pak) Ltd.; Lederle Laboratories (Pak) Ltd.; Gruppo Lepetit; May & Baker (Pak) Ltd.; E. Merck Darmstadt; Merck Sharp & Dhome (Pak) Ltd.; Parke Davis & Co. (Pak) Ltd.; Pfizer Laboratories Ltd.; Sandoz (Pak) Ltd.; Smith Kline & French (Pak) Ltd.; Welcome (Pak) Ltd.; Wyeth Laboratories (Pak) Ltd.

25. Government of Pakistan *Report of the Expert Working Group on Chemicals, Etc.* (1978:35-37).

26. Report of the Pakistan Chemists and Druggists Association's 15th Annual General Meeting in Karachi on October 25, 1977 (Report is dated November 14, 1977).

27. One factory reported that the Government Wage Board recommended Rs.250-320 per month for unskilled workers, but that they actually pay these men Rs.450. Another unit reported that the unskilled workers who they previously paid Rs.200 monthly now receive at least double that sum.

28. I have discussed the conditions of women in the pharmaceutical industry, and implications of this for Pakistani society, in Weiss (1984).

29. Nasra M.Shah & M.A. Shah (1980:98-99).

30. Interestingly, this very same justification for employing women was documented as far back as 1862 in England in a manager's reply to the Children's Employment Commission (Pahl, 1984:45).

4

The Steel Re-rolling Industry

The steel re-rolling industry in Lahore has experienced a very different type of growth from that of the pharmaceutical industry. Industrial entrepreneurs in pharmaceuticals entered it despite governmental and foreign-based restraints in three successive stages, each characterized by men holding very different orientations towards business. Therefore, the social organization of work significantly changed as the industry grew and as technology was increasingly employed.

However, the orientations of the primary actors in the steel re-rolling industry have been markedly different. This industry has not experienced a similar transformation, neither socially nor technologically, as the factors conducive to development in this field were different. In only a few instances (i.e., in just the largest units) has sophisticated, complex machinery been adopted. The scale of production of most units is not very large; only a certain quantity of products are provided. There has been virtually no pressure to change the system, either to enlarge the labor force or to lower the costs of production. For the most part, the growth of the steel re-rolling industry typifies that of a necessary, basic manufacturing industry in many Third World countries: it has grown out of the industrial foundations historically present in the country but has not made a "fundamental break with the past" to the same degree as other sorts of industries. This industry is on the margin of the capitalist system in Pakistan: it transforms and modernizes the infrastructure, but it has not become truly capitalist itself.

Entrepreneurs in this field are usually familiar with the entire process of steel re-rolling, from the procurement of raw materials to the hazards involved when men holding tongs guide the hot steel rods through mills on days when the temperature reaches 125°F, to the transporting of the finished re-rolled steel products to the marketplace. The mill-owners' current occupations are often simply extensions of their *lohari* [iron-working] backgrounds, though in recent years educated bureaucrats seeking a profitable field have bought into existing units. It is problematic, therefore, whether we can affirm that a bourgeoisie in the true sense has been formed or not.

Given the slowly growing market and shortage of raw materials, there has been no necessity for these small units to transform their production process or social relations. However, the industry is in a state of fragile equilibrium: if they have to extend the scale--either by having to produce a more complex product or more goods due to enhanced availability of raw materials, or if they must contend with outside competition--the limitations of the way in which business is conducted will surface. Therefore, the retention of patriarchal cultural orientations and the lack of adopting new ways of doing business may have served to prevent the emergence of a fully developed new class in this field.

The ready availability of steel is fundamental to any nation's growth. Prior to 1980, Pakistan did not have an operational steel mill. Those mills which had existed in the subcontinent prior to Partition were located in areas ceded to India. Bilateral and multilateral assistance as well as foreign investors balked at the prospects of financing one as Pakistan lacked the necessary high-grade iron ore for an integrated steel mill. Instead, an important steel re-rolling industry emerged. As a means of comparison, Appendix IV lists those Third World countries with integrated steel facilities, those (like Pakistan) with re-rolling mills, and those with no steel-making capacity of any kind.

The steel re-rolling industry is based on procuring raw materials from a variety of sources, re-rolling (converting) these according to set specifications in mills which are generally between 7-1/2" and 12" large, and then selling the finished products (e.g., bars, flats, angles) to wholesalers in the marketplace. All activity takes place outdoors, although sometimes a high roof, resembling that of a huge barn, will cover the area. A fairly large land area is necessary for storing, heating and cooling the steel.

The most prominent market for steel products in the Punjab is Badamibagh, an industrial area in Lahore long associated with this industry. On any given day, the two entrances to Badamibagh, the "almond grove" whose trees have long ago disappeared, are crammed by all makes of transport vehicles. Eight foot long *rehras* [horse-drawn carts] will drag twenty foot long steel bars, pulling them to market. Drivers in brightly painted trucks often honk at the horses shyly crossing the railroad tracks. Men predominate; no women are to be seen. Badamibagh is a rough area; families live a short distance away, often within the walls of Lahore's old city or in the area by the Railway station.

Before elaborating on the entrepreneurs who fostered this industry's growth, we must first glance at the historical position of lo-

A horse-drawn rehra transporting re-rolled steel bars to the market in Lahore

hars within the indigenous culture and attempts to develop a Punjabi steel industry prior to Partition.

Iron-working in the Punjab

Historians (Chatterton, 1912; Rao, 1957) claim that the iron and steel industry in South Asia is at least two thousand years old. This, however, has been conducted largely at the village level with lohars, members of iron-working castes and qaums, fabricating products for local usage within the strictures of reciprocity characterizing the *jajmani* system. A majority of lohars in Punjab have historically been Muslims.

The first recorded attempt at manufacturing iron and steel on a commercial basis in India was the unsuccessful unit established by Mottee and Farquhar in 1779. Fifty years later, Josiah Health, subsidized by the East India Company, tried to start a factory at Porto Novo. This venture, too, did not succeed. The Barakar Iron and Steel Company, begun in 1887 at Kulti, was the first firm to successfully manufacture pig-iron in India on modern lines (Rao, 1957:1-36). However, the watershed year for the modern iron and steel industry in India was 1903, when Jamshed Tata began laying the foundation for his Tata Iron and Steel Company (TISCO) in Bihar, not far from Calcutta. TISCO manufactured its first iron and steel ingots in 1909, drawing the necessary raw materials from the surrounding "iron belt." This iron belt includes parts of Bihar, Orissa, Madhya Pradesh, Mysore and Madras, where extensive iron ore deposits have been discovered.[1]

Nothing comparable has ever been found in the northwest portion of the subcontinent, though Chhabra records that some iron ore was produced along the Punjab's northeastern frontier and in limited quantities in a few other mountainous areas. Iron was found at Suket, Bashahar and Mandi in the old Punjab (all presently in Himachal Pradesh in India), and the hills north of Peshawar were the source of a particularly high grade. However, many of these locations were inaccessible, and iron from them was more costly than imported materials.

In the Punjab, the village lohar's work traditionally was subordinate to the demands of the agricultural system, specifically to cultivating and harvesting operations. Rural lohars made implements for the domestic use of the families in their villages but rarely traded their goods on any open market. However, as they remained tied in with production, they enjoyed a high degree of security compared to

their urban counterparts as they were entitled to a share of the crop regardless of the fate of the harvest.

Most lohars located in towns traditionally worked on a type of cottage industry basis. They were independent artisans working on orders in their own homes, but often found themselves at the mercy of floods and droughts. During such periods their trade suffered as people put off making major purchases until more prosperous times returned. A very small number of these urban lohars ever worked for wages in shops or factories.

During the British period, urban lohars began to make more complicated instruments, also adopting steel into their manufacturing repertoire (iron remained popular in villages). Due to economic uncertainties which the urban lohars had been facing, they found it more efficacious to specialize in products in particular locales. For example, by 1908 there were some twenty-six shops in Gujranwala manufacturing iron safes, chests and *almirahs* [traditional-style closets]; steel trunks and dispatch boxes were being made in Amritsar, Lahore, Delhi, Sialkot and Multan; and iron locks were coming from Jullunder, Ludhiana, Delhi, Sialkot and Gujrat. Gujranwala, Sialkot and Shahpur districts earned the greatest reputations for cutlery production, while Wazirabad had the distinction for the finest manufacture of knives.

Since there was no smelting of iron ore in the Punjab, all raw materials were thusly imported from outside the province. Machinery was hardly used in these labor-intensive factories. Saini (1936:12) notes that while Hindus and Sikhs generally owned the manufacturing units, most of the workers in the cutlery industry were Muslims; forty per cent of all workers were children. The qaums most often employed in this work in the Punjab included Lohars, Kashmiris, Mochis, Barwalas, Telis, and Awans.

In Sialkot, following the birth of the sporting goods industry, superior quality surgical instruments and cutlery manufacturing units were opened, but these had to import their raw materials from Bombay, Calcutta and Karachi *(Monograph on Iron and Steel Industries in the Punjab,* 1908:5). Sardar Bahadur Shivdeo Singh Uberoi, related to the founders of the first sporting goods factory, opened Sialkot's first surgical instruments manufacturing unit in 1894.

The British recorded that the oldest and largest steel factory in the Punjab in the early 1900s was that of Rai Bahadur Buta Singh in Rawalpindi, which manufactured nearly three hundred thousand rupees worth of various goods per month (mostly for the military). However, due to high expenses and the uncertainty as to whether they would be able to retain their contracts with the Raj, the factory

used few machines. Here and in other factories throughout the province, capital shortages also prevented mechanical expansion thereby increasing the costliness of the finished products.

In 1917, the British attempted an update of Latifi's well-known *Industrial Punjab* (1911). In their update (Badenoch, 1917), they mention three large foundries in the Punjab (one each in Lahore, Rawalpindi and Multan) and countless other small-scale foundries, though there is no mention of the latter's locations. Flour mills, sugar cane presses and lathes were also being manufactured at this time in some Punjabi towns, although they were expensive to produce for the limited demand they enjoyed and were therefore quite costly.

However, the limited steel production was soon to come to a halt as the British slowly began the underdevelopment of this industry in the Punjab. Their reasoning, given the times and their interests, made sense: since cheaper, better quality products could be imported from abroad or from other areas of the subcontinent, they decided not to promote this industry in the Punjab. As the 1908 *Monograph On Iron & Steel Industries in the Punjab* (1908:8) concludes:

> Speaking generally, there is no doubt that articles manufactured on European lines are stronger, more durable and better in every way than those made by native methods. The latter are certainly cheaper to buy, but are of little real value to the man requiring a good strong article for practical use. They do of course suffice for the needs of a poor villager at present, but as the standard of living rises, the quality of native manufacture will not rise in proportion, simply because the processes employed are not of such a kind that they can ever supply articles suited to a high standard of living.

Therefore, local craftspeople were fabricating steel and iron goods, for the most part, for indigenous use in the Punjab before Partition, though some manufacturing units were producing complex tools, cutlery and other products in particular industrial areas. The owners of these units tended to be Sikhs and Hindus, while the craftsmen themselves were often Muslims, a similar arrangement to that of the sporting goods industry in Sialkot. However, the path taken by the two industries differed greatly after Partition. The new industrialists in the sporting goods industry were faced with certain

ruin if they didn't innovate their manufacturing process and reorganize their labor; the new industrialists in the steel re-rolling industry instead found a hungry market, no external competition and were able to continue operating along time-worn lines.

Industrial Growth Since Partition

This industry has experienced a linear growth which has not been differentiated by the adoption of new techniques or technology nor by varied waves of entrants. Given its aptitude for conservatism, we will briefly look at the state of the industry since Partition, particularly addressing the major problems which confront the over three hundred steel re-rolling units in Pakistan (nearly two hundred of which are in Badamibagh). Finally, we will address the characteristics of the steel re-rolling bourgeoisie, particularly the ways in which they have maintained traditional attributes and values.

Considering the importance of steel to the country's economic foundation, this basic industry was in dire straits at Partition. A few steel re-rolling units had previously been in operation although many of these underwent major reorganization after 1947. These include BECO and Ittefaq, and other smaller units such as Shalimar Steel Re-Rolling, Pakistan Steel Re-Rolling and Modern Steel Re-Rolling.

Before Partition, a Hindu bania had established the Batala Engineering Company (BECO) in Badamibagh. C.M. Latif (an Arain) and his brother were given that foundry as a replacement shop for a factory they had left behind in India when they migrated to Pakistan. BECO grew to become the largest integrated foundry and steel re-rolling mill in Pakistan, manufacturing such items as cycles, electric motors, engines, structurals, machine tools, and power looms, besides their substantial re-rolling operation. In 1972, the company was nationalized and renamed PECO, the Pakistan Engineering Company. BECO's position vis-a-vis the rest of this industry has always been unique in that it could hardly be considered a competitor. The government had always given preferential treatment to the firm while relying on it to provide a large percentage of its steel needs. At nationalization (on January 2, 1972), there were more people working in BECO's accounting department alone (about forty-five) than the total workforce in many steel re-rolling units. BECO's growth as the major engineering firm in the country was atypical; it was the only one with its own sales organization. Powerful and innovative, C.M. Latif became known as Pakistan's "Man of Steel," and was able to dominate the industry. Sometimes, after im-

porting a large shipment of raw materials, BECO would sell some to smaller units, thereby increasing its influence over them.

The only other unit comparable to BECO is Ittefaq. Five brothers, agriculturalists from Amritsar, began it in 1940 as a small-scale foundry to make cast-iron molds. They gradually began making machines and built a workshop to assemble them into lathes, oil expellers and diesel engines. However, Ittefaq did not install its re-rolling mills in its Kot Lakhpat workshop until 1966, at about the same time it began importing furnaces for melting scrap from the Soviet Union. This was long after the firm's foundry and workshops were established and the company had diversified into other fields. Nationalized in 1972 and renamed LEFO, Lahore Engineering and Foundry, the company was returned to its owners in June, 1979 and renamed Ittefaq. Since then Ittefaq, like PECO, has installed technologically advanced semi-automatic re-rolling mills, partially to increase efficiency and partially to limit their workforce. A son of one of Ittefaq's founders who remains one of the company's owners, Mian Nawaz Sharif, is now Chief Minister of the province of Punjab and a key national political figure.

The experiences of BECO and Ittefaq, while strongly affecting the general steel industry in Pakistan, had minimal impact on the owners of the local steel re-rolling units. As different as the developmental experience of Karachi was from the rest of the country, so too was the growth of BECO and Ittefaq different from the majority of the companies in this field. Therefore, further elaboration on these two companies does not enhance our understanding of the middle-level indigenous bourgeoisie who emerged in the steel re-rolling field.

In the early years, as part of the government's recognition that a "fresh start" was necessary in industry throughout the country (Directorate of Planning & Publicity, Government of Pakistan, 1955:55-56), it declared that two decisive steps would be taken:

1) existent, old factories would be rehabilitated (these were to be expanded, revamped or modernized); and
2) a number of new industries would be established through the joint efforts of private and government enterprise, particularly those industries "dealing with steel, re-rolling mills, machine tools. . . ."

Finding itself with no steel mill and few raw materials, the government immediately invited some American representatives to Pakistan for advice on how to satisfy the nation's iron and steel re-

quirements. The government asked the Americans to survey the kinds and quantities of steel which Pakistan could afford given its limited economy and to recommend effective methods for meeting these goals with a minimum of foreign exchange expenditure. This initial Mission recommended a primary steel plant be set up, the responsibility for which was eventually given to the Pakistan Industrial Development Corporation (PIDC).[2] However, since Pakistan had to import much of its coal and iron, the project was deemed impractical and was shelved until the Bhutto era when the government finally entered into a collaboration with the Soviet Union to build a steel mill near Karachi.

Interviews with industrialists in the re-rolling industry reveal that their field was only remotely assisted by the government in the country's first decade. As one man sums the situation up:

> We didn't ask for any help; we didn't get any help... From 1947-58, we were always having a new government, after six months or a year, a new government.

A major problem then (and remains today) concerned the procurement of raw materials for the mills. At the time, raw materials--billets, ingots or re-rollable scrap--came from two sources: billets and ingots were imported while re-rollable scrap was retrieved from the burgeoning ship-breaking industry in Karachi. Re-melting furnaces (for melting down scrap into ingots) did not appear until the late 1960s. Although the industry in the pre-Ayub Khan period was so dependent on raw materials imports, only those people who didn't have workshops were given licenses to import steel. Others could only receive temporary import licenses and were therefore unable to negotiate loans on the basis of them. The entire industry was given annual entitlements which had to be divided among the separate units. This arrangement proved to be a disincentive to growth, as an established quantity of goods had to be divided well in advance.

A major survey of the steel re-rolling industry was conducted by an American expert under the U.S. Point Four Program in 1954-55. The report recognized twenty-nine re-rolling mills in the Punjab and NWFP, twelve in Karachi and twelve in East Pakistan (now Bangladesh). Out of these fifty-three mills, only twenty-seven were recommended to be licensed to import billets.[3] The twenty-six other firms had to remain dependent on local scrap left over by the bigger mills. Those with import licenses could import between 7-55 per cent of their requirements. The strict import allotments were based

on a formula which considered the size of the mill, the amount of power needed to run its engines, etc.

After 1960, the procurement of raw materials became significantly easier when steel was put on the free import list. In 1961, a second (and final) survey of the steel industry was conducted by H.W. Mansell (Roll Design Expert for the Colombo Plan) and J.R. Davey (a government advisor). Units were categorized as recognized/unrecognized, and as efficient/not efficient.[4] This survey recommended that two-thirds of the production capacity of efficient units (forty-eight in Punjab and NWFP, twenty-five in Karachi, fifteen in East Pakistan, out of a total of one hundred fifty-six surveyed mills) should become the basis of issuing licenses for imports. For example, if a mill was capable of re-rolling ten tons per day, it should be given permission to import 6.6 tons daily. Steel re-rolling mills were also classified by the mill size (i.e., the diameter of the roll, or groove, between the two rollers, through which white hot steel is passed). Every roll has a certain minimum diameter of thickness. Anything smaller than the minimum thickness pushed through it will cause the roll to crack. The mill classifications, still in use, are:

Size of mill	**Classification**
11" or greater	large
more than 7 1/2", but less than 11"	medium
less than 7 1/2"	small

Therefore, raw materials were finally available, albeit in limited supply. Mill owners continued re-rolling steel billets, ingots and scrap throughout the 1960s on much the same lines as in the 1950s. During this era of frenetic industrial activity in the country, the ready availability of steel was critical. It was needed not only for building materials but for the growing engineering sector as well.[5] The few developments which occurred in this industry include some owners expanding their mills by an inch or two and some laborers finally gathering enough capital to begin their own re-rolling units, often in Shalimar, an industrial area in Lahore near the Indian border.

Difficulties again resumed for the steel re-rolling industry during Yahya Khan's government (1968-71). One industrialist remembers that the government kept promising raw materials, but:

> That's all they did, they just promised raw materials, and sometimes there was some re-rollable scrap

> available. It was hard during that time to keep operating. But that wasn't a stable government. . . .

The situation in the steel re-rolling industry during the more "stable" government of Zulfiqar Ali Bhutto did not appreciably change during the Zia years, even with the opening of the Karachi steel mill in 1980. The three key issues which emerged in the early 1970s continue to persist, to a large extent, two decades later. These concern:

1) the acquisition of raw materials, including the unreached expectations of the re-melting furnaces and the government intermediary for importing and exporting, the Trading Corporation of Pakistan (TCP);
2) labor relations;
3) and the very real threat of nationalizations.

As mentioned above, raw material acquisition has always been a headache for this industry. The higher the quality of raw materials, the better the resultant products, although if imported materials are used the final product is appreciably more expensive. The most important of these products are small rods, t-irons, re-enforcing bars and joints (for use in village homes); the most popular items by far are m.s. bars. Some units also fabricate flat bars for automotive springs and pipes; others make small bars only using ship plates, which they can re-roll directly; while still others make the machinery for sugar, flour and textile mills. New steel re-rolling mills are also constructed from locally produced re-rolled steel.

With the appearance of local furnaces in the early 1970s, supplies became more readily available than in the past. The furnaces melt iron and steel scrap down into ingots, and were providing forty per cent of the steel re-rolling industry's needs prior to the opening of the Karachi steel mill. However, many furnaces had been constructed in conjunction with existent re-rolling mills for their exclusive needs and were not supplying much raw materials to outside units. Fifteen per cent of the remaining raw materials were derived from the now diminishing Karachi ship-breaking industry and forty-five per cent were imported.[6] The Karachi steel mill, with an estimated capacity of 1.01 million tons of re-rollable steel per annum in 1984-85, has made a marked difference in their procurement of raw materials but much of the new output is both expensive and consumed by the larger companies (e.g., BECO and Ittefaq).

Tariffs for importing steel remain extremely high, as the duty of 72.5% is accompanied by a mandatory 10-15% sales tax. The primary means for importing billets is through the TCP. The TCP was originally created to import goods from socialist countries as they preferred dealing with just one government organization for everything. Its scope was gradually expanded, and the Zia government started importing from non-socialist countries through the TCP as well. Industrialists in this industry claim that a lot of red-tape is involved when importing through the TCP. Plagued by inefficiency and bureaucrats who lack the knowledge or experience of buying the raw materials for actual re-rolling mills, the TCP has not gained much favor among these entrepreneurs. The TCP's overhead is very high as it is relatively slow in handling the consignments, resulting in incurred interest and other expenses. A mill owner reported to me that the TCP is only helpful when a unit has a lot of money to import prime quality products and can deposit the full payment with them, knowing that the product won't arrive for six to eight months. Many men complained that the delivery date of the goods is never quoted and the time period involved often fluctuates. Orders have arrived up to a year after they were originally placed. In addition, companies with surplus capital still cannot import whatever they desire, as one man argues:

> This TCP is not all that helpful. It is a drawback, because some units require more than one hundred tons but the TCP allocates only ten tons, so that is a problem.

Some mill owners have found that after waiting months for their shipments, the wrong size billets arrive. As another man recounts:

> Being a government organization, they couldn't care less about what people thought about them. If I say I want a thousand tons of billets, say 2" by 2", they'll book my order, they'll take my advance money, but then, after some time, they'll say "Now here's your billets, take them." And to my horror, I find that instead of 2" by 2", they're 4" by 4". If my mill is only 7-1/2", I just cannot put four inches through it!

Secondly, the problems with labor in this industry are not very dissimilar to those in the pharmaceutical industry. Strikes were common during the Bhutto era and the ensuing migration of un-

skilled and semi-skilled workers to the Gulf stung this industry hard. Increased opportunities for technical and skilled workers exist in the Gulf and elsewhere in Pakistan on government construction projects and in the housing industry. Re-rolling steel is hard work, especially in the summertime when the heat of the day, mixing with the heat from the steel, causes many strong men to pass out from overexposure. The steel re-rolling mills are usually located outdoors, which helps the exposure and ventilation problems somewhat. Most mills have two shifts, though the smaller ones only have one. Gul Mohammad, owner of Kamran Steel Re-Rolling, describes what the laborers must endure:

> The shift is only about five and a half hours because it's a very tough job. They have to stand before almost 80 or 90 degree centigrade heat, so they can't work more than one or one and a half hours at a time. We keep changing after one hour.

Special provisions are made for workers in the summertime such as constantly available cold drinks and extra pay for less work.

Most workers live in the areas surrounding the mills, and have no education whatsoever. In 1980, the average salary for an unskilled worker was five hundred rupees [$40]; for a semi-skilled worker it was seven hundred to eight hundred rupees [$60-65]; and skilled workers earned between one thousand and three thousand rupees [$80-250], depending on their level of skill and experience. Lathe operators are at the low end of the scale while foremen are at the top. By government ordinance, employees must give five per cent of their wages to a participation fund, which provides for a form of profit-sharing.

While the majority of workers in the past in this industry were Punjabis, Pathans from the NWFP have come to dominate the workforce in recent years. The unspoken assumption is that the more experienced and skilled workers have out-migrated to the Gulf.

Most of the factory owners interviewed employ between 20-60 laborers. Most mills have a union, though labor's power in general--and in this industry in particular--has diminished since the mid-1970s. Contract laborers are also being hired more frequently now since benefit obligations to permanent employees do not apply to them.

Thirdly, fears of nationalization permeated this industry in the 1970s after BECO and Ittefaq were nationalized. Most industrialists

were concerned that their units would also be nationalized with no compensation. However, of the some 2,400 units nationalized under the PPP government, only a handful of steel re-rolling companies joined this select group. Mohammad Ishaque Khan of Ravi Steel Re-Rolling had been concerned during this period, recognizing that:

> . . .as industries grow and expand the private sector, so do interests grow. Nationalized industry becomes a tendency.

Ashraf Mian, Managing Director of Aryan Steel Industries, notes that he and his colleagues were not worried when the government took over BECO and the other extremely large companies, as these were in the country's interests to control (and BECO was a fierce competitor). However, the situation changed:

> when Bhutto took over very small husking mills, whose capital was only one or two lakh rupees, and the ginning mills . . . well, that was the turning point against him.

They were worried that the government would conclude that as all basic industries were vital to the country they should all be nationalized. However, after BECO and Ittefaq were nationalized, both of their operations became rather inefficient and accumulated large debts. Many explanations have been advanced to explain this: their new managers, often government bureaucrats, knew little about steel and the re-rolling process and therefore amassed high overheads; or that the workers gained power which didn't result from struggle, but was rather just handed to them, and they did not take the responsibility necessary for running an efficient mill. For whichever reasons one subscribes to, the military government of Zia ul-Haq felt itself justified to offer the units (except for PECO) back to their former owners after it came to power.

Few innovations, either with labor policies or technological experimentation, were attempted in most mills. To a large extent, except during the volatile period of the mid-1970s, relations between owners and workers remained at a level akin to that which had existed in small workshops at the turn of the century. This is curious, particularly when we recognize that steel re-rolling products are the foundation for all that is "modern" in Pakistani industry.

Descriptions of Industrialists

Most of the prospering steel re-rolling mills were established by the end of the 195Os, although some have since been taken over by new management. The backgrounds of the men who began these units reveal a few striking features:

a. A number of them came from cities in East Punjab (e.g., Jullunder, Batala, Amritsar) where they had been laboring in forging workshops;
b. The majority were illiterate, with only a few having the equivalent of an eighth grade eduction;
c. Those native to Lahore had either been in the retail steel trade or had been laborers in the steel industry;
d. Nearly all of them came from families where fathers, uncles and grandfathers had worked in the steel trade, and whose close relatives remain in this field;
e. A minimal capital investment which often came from the family was required to install a mill (this changed over time);
f. Qaums were predominantly Lohar, Arain and Mughal.[7]

This industry rarely attracted the trader looking for profits in a new field nor the entrepreneur willing to invest in any arbitrary business, as we found to be the case in the pharmaceutical industry. Rather, the few factory owners whose families' traditional professions were not in steel had received their re-rolling units as replacements for other types of mills left behind in India.

Shalimar Steel Re-Rolling is a typical re-rolling unit which grew out of a workshop. Its founder was initially employed in a technical job at the railway department, where he worked with his father, an engine driver. In 1938, he and his three brothers established a foundry in Baghbanpura, another industrial area in Lahore. Working closely with one of his brothers, he manufactured a 5" mill in the Baghbanpura foundry and opened Shalimar Steel Re-Rolling in 1950. In 1960, a 7" mill was added.

When the original owner died in 1980, his son, Mukhtar Ahmed, became Managing Director. Mukhtar Ahmed's interest in steel is not surprising, since many of his relatives are also in this

field. His family, whose qaum is Mughal, has lived in Lahore doing "*lohar ka kam*" [the work of ironsmiths] for generations. Of his three uncles who were originally involved in the foundry, two have their own re-rolling mills while the third manufactures pipes. None of them went to school beyond the eighth grade. Although Mukhtar Ahmed received an F.A. (Intermediate in Arts) degree he knows little English, which creates some difficulties with government bureaucrats since he cannot read many of the necessary forms. Four of his five brothers also work in the mill (the fifth works in a bank); his cousins also run steel re-rolling mills.

This mill is one of the few smaller units with its own sales depot. It was there that Mukhtar Ahmed began his career in steel. He worked at the depot for five years before joining the mill in 1971. He explains that family circumstances forced him to become involved in this business. They felt that the market middlemen weren't giving them the right price for their re-rolled steel. His uncle, therefore, opened the sales depot in Landa bazaar, the colorful market in Lahore near Delhi Gate where all types of used clothes from all over the world are for sale.

Relations with the 30-35 workers at the mill have fluctuated. During Bhutto's era, the non-unionized workers once shut the unit down for three days. They had about thirty-five demands such as wanting housing provided, education benefits and conveyances. A compromise was reached and work carried on as usual. In the climate of restrictive labor laws under Zia ul-Haq, there were only minor disputes with the union.

In 1980, Mukhtar Ahmed was planning on setting up his own furnace as procurement of raw materials was becoming increasingly difficult. He had heard that many other mill owners had found this to be the solution to their procurement problems. However, he had no other immediate plans for expanding the mill or employing new technology. Although his children were studying in school, he expected them to join him at the mill when they graduated. In effect, his sons were expected to continue in the family's occupational field, perhaps enlarging the mill somewhat, but making no other substantial changes.

This is instructive, for economic actors such as Mukhtar Ahmed apparently wholly subscribe to the traditional economic ethos of Punjabi Muslims. In effect, sons follow in their father's footsteps. They inherit the physical unit--be it land or a business--along with the requisite cultural baggage--how the unit is run. At no time have they been forced either by necessity or by competition to make any sort of break with the past. Can we truly call such actors a bour-

geoisie? This is problematic, for when class lines have been demarcated by the unions, the responses of the mill owners tend to be those of pragmatic industrialists. Yet when making decisions about the mill itself, owners recede from the "modern industrial" mode and instead perform as former class actors would have, relying on ties of kinship and local solidarities of necessity more than on any other considerations.

Mills such as Mukhtar Ahmed's, where many relatives have worked together, have occasionally been plagued by family disputes. The brothers who originally owned Moghul Steel Re-Rolling Mills became enmeshed in a disagreement as soon as it was put up in 1953. Although they had built the mill themselves, preparing everything with their own hands, they had sold it by 1958 and each brother established his own separate unit.

One of the brothers, Mirza Mohammad Bashir, put up a 4" mill, New Lahore Steel Re-Rolling, in 1958. Bashir only speaks Punjabi, and is illiterate. He recalled how he and his brothers labored in his family's workshop in Amritsar making lathes and small pumps before Partition. His family owned that workshop for generations (it was established by his "*dada ka dada ka dada* . . ."), and he expects his sons--and their sons--will own his steel re-rolling mill equally long. His sons are currently foremen in the mill, overseeing the laborers toiling there.

Bashir discussed substantive changes which have developed in the relationship between employers in his field and laborers. In comparing conditions in the past with contemporary ones, he said:

> Then [in the time of his grandfather] people cared for people and were concerned with relationships. Then, there was little ambition for wealth. People used to respect people for being a good person, a pious person. People didn't think of becoming rich overnight, but now they do, and so all they care about is money. Their demands have increased and they only respect people for their wealth. Whatever their character is, nobody cares for that.
>
> People would come and learn the job from my *dada* [paternal grandfather] and his dada. They would respect them like their own parents. But now you teach people and they leave. They don't care for you, who you are, what you are.

Bashir, wearing a *shalwar-kameez* and a black *qazi* cap, does not like these changes, viewing them as a growing trend throughout the world which is bad for everyone. The only changes he has made since his mill has been operating is in its size, increasing it from 4" to 6" in 1966 and then to 7 1/2" in 1975. In his dress, his speech, his views and his actions, he interprets his traditional culture in a static manner. It is not only a rejection of the imported modernity but a disdain as well for culture transformed.

Lahore Steel Re-Rolling was begun by Mohammad Aslam, an Arain, in 1953. His father had previously manufactured nut bolts in his Jullunder workshop and was given a replacement unit in Lyallpur (now Faisalabad) for making agricultural implements after Partition. Aslam's brothers are also in this field: one owns Arain Steel Industries; the other owns Abdul Qayyum Fazel Mohammad Ltd. His wife and sisters are also directors of the re-rolling units. He enrolled his son at Aitchison College, educator of the landed nobles in a by-gone era, with the expectation that he would join the company after his graduation.

Lahore Steel initially had only one mill; by 1980 it had three. It originally employed between 40-45 workers; it employed about 150 men in 1980 and had become one of the most prosperous in Lahore. However, the orientation of its owner, Mohammad Aslam, towards work and industry is no different from that of Mukhtar Ahmed or Mirza Mohammad Bashir. There has been minimal innovation, minimal reinvestment of the profits to increase the plant's efficiency and output, and minimal attempts to incorporate new forms of technology or labor organization into the unit. One of his brothers explains the family's interest in steel by saying:

> My father was a lohar. He had a small iron business in the *muhalla* [neighborhood]. This is our line, the iron line.

Traditional orientations towards being a lohar have not changed, nor have innovative techniques based on those orientations been adopted. While these men feel connected to a rich heritage, their units have experienced limited development.

The background of Kamran Steel Re-Rolling's owner and Managing Director, Gul Mohammad, is quite different from those of the above-mentioned entrepreneurs. He had been preparing for his civil service exams in Calcutta prior to Partition. His family, Pathans from Peshawar, was running a fresh fruit business in Calcutta as well as other trading operations in Delhi and Bombay in 1947. They had

earlier been involved in transporting, using camel caravans to travel across India. An elder brother of his (who died in 1967) stayed on in India after Partition to look out for the family's business interests there.

Gul Mohammad entered the retail steel trade in Lahore in 1950. Through this work, he came into contact with many mills, saw that they were doing well, and then bought his own unit, Taj Steel Mill, in 1952. Taj was an idle, closed mill in Badamibagh which required a number of improvements before it was opened. He sees his entry into steel as a simple transition, for:

> Steel was one of the lines which came in my way. I, as a newcomer in business at that time, was tapping different businesses. We obtained so many government contracts and we became involved in textile trading and food merchandising and all that. There were so many different ones, and one item was the steel. But the one which became permanent was the steel. The others did not produce good results, and so naturally I had to close them down.

Realizing that there weren't any re-rolling mills in Peshawar, Gul Mohammad received government permission to set up a new mill there, Frontier Industries, in 1954. Eventually, Gul Mohammad entered politics, and was an M.P. (Member of Parliament) for ten years during the Ayub Khan era. A trader at heart, he bought Kamran Steel in 1974. This new unit, located on Sheikhupura Road just outside of Lahore, had been jointly established in 1970-71 by five entrepreneurs. They had bought machines from the Soviet Union and began the unit on a trial basis. After losing between Rs. 70,000--80,000, they closed down the mill for a year and then sold it to Gul Mohammad. His son joined him in the mill, selling the final products to dealers in the market. Gul Mohammad supervises "policy control" and a partner does the raw materials purchasing.

Kamran Steel has five different sections. These are: (1) the re-melting furnace (imported from the Soviet Union); (2) the rolling mill; (3) the casting block (where spare parts and machinery, mostly for their own use, are cast); (4) the forging hammer; and (5) the bundling and pressing section (where lightweight scrap is pressed into 80 or 100 kilo bundles, making them easier to transport). Kamran Steel was one of the first mills to produce heavy sizes of R S joints (structural steel) in the country. Gul Mohammad has many other ideas for innovating this mill, along the lines of larger firms

such as PECO and Ittefaq. The mill in Frontier Industries, near Peshawar, was being scrapped altogether because it had become too old for efficient operation, and a new one was being put up to replace it. The complete mill was being fabricated at Kamran Steel.

Gul Mohammad would like to see more modern technology adopted in the steel re-rolling industry in Pakistan, but recognizes that industry's limitations. He noted that the cost to produce one ton of steel in Belgium is one-third the price that it would be in Pakistan due to the increased mechanization they have available:

> I believe it is because they have better technologies and they have it on a giant scale. We have it here on a very small scale. Our costs are very high compared to that. But beginning in 1970, the quantum of aid started decreasing and our debt servicing started increasing. There was less foreign exchange available for importing, and therefore we had to embark on producing as much locally as possible. One of the industries which flourished because of that restrictive import was steel. By that time, people started realizing that there was a lot of junk and scrap available in the country. Now we are producing a lot of steel ingots from local furnaces.

He credits his perspective on the industry, however, to his advanced education (he received an M.A. in Calcutta) and especially to his ten years in politics. He claims that those experiences helped him in business a number of times, and that for these reasons he is different from the majority of steel re-rolling mill owners.

He and entrants like him are different from the majority in another significant way. They entered the field via a capital investment, instead of as a son following in the footsteps of his father. He was forced to break away from his own family's traditional occupation because of Partition, and reacted to business opportunities and obligations in a manner similar to that of many entrepreneurs in the pharmaceutical industry. Other mill owners could have incorporated many of the innovations which he undertook with minimal investment; that they did not is crucial to our understanding of the incomplete nature of class formation in this industry.

Most steel re-rolling mill owners regard its future prospects as good, for construction is always going on and steel is a necessary product. If the industry doesn't thrive, neither will the country, for imported steel is extremely costly and will severely injure Pakistan's

balance of payments deficit further and sufficient steel at a low cost remains unavailable from the Karachi steel mill. Many industrialists see their problems--that of transportation, rising prices and labor--as global ones which can be solved only if they can be flexible. Many recognize that only by initiating new projects can further growth per unit be achieved. Syed Masoodul Hassan of Super Steel Re-Rolling, for example, successfully imported used railway lines from the United States with which to experiment making t-irons, only to discover that it was cheaper to use ingots from local furnaces. Another unit was considering importing a semi-automatic mill to alleviate its labor problems. Rizwan-ul-Haq, whose family had owned a flour mill in India and received the Modern Steel Re-Rolling Mill as a replacement at Partition, has perhaps been the most innovative of all. With advice from German experts, he has set up an extensive laboratory at his mill (Ittefaq and PECO were the only other mills in 1980 with such laboratories). His laboratory enables him to conduct quality control tests on his steel. The pay-off is that he won the contract to supply steel for Tarbela Dam, as his bid was less expensive than imported products of equal caliber.

In most instances, former laborers began re-rolling mills; on rarer occasions, traders and bureaucrats, such as Gul Mohammad and his partner, entered this field for investment purposes. Regardless, no entrant was ever inexperienced, but few have made any rapid progressions. In an industry plagued by illiteracy, there has been a remarkable linear progression. A fragmented bourgeoisie has emerged in this industry, for it is one closely aligned with traditional orientations towards life and technology. The interplay between culture, the demands of industrial growth, and class formation strongly affect development prospects. Mill owners, relying on a cultural orientation complacent with the status quo which drew on family legacies, were not compelled to make a "genuine break with tradition." While in the pharmaceutical industry, demands for increasing the scale of production reinforced the separation of spheres between owners and workers, the minimal production of scale here did not. They had neither the encouragement (and later the threat) of transnational corporations, as did the industrialists who we have observed in the pharmaceutical industry, nor the requirement to reconfigure that tradition, as we will see in the following chapter on the sporting goods manufacturing industry of Sialkot.

Notes

1. For a history of the Indian steel industry, along with an excellent appraisal of its growth, which is profoundly different from that of Pakistan's, see William A. Johnson (1966). He shows how the expansion of India's steel industry was carefully incorporated into the state's overall development plans.

2. For further elaboration on the details of this first Mission, see the Department of Supply & Development, Government of Pakistan (1961).

3. Details of this survey are sketchy, as I could find no available copies of the original report. These fifty-three mills must certainly represent mills of a minimum size, as it is commonly known that there were many father-son mills also in operation.

4. This system of recognized/unrecognized units was established by the government. Only recognized mills could qualify to import raw materials. However, the Pakistan Steel Re-Rolling Mills Association admits there were hundreds of non-recognized units, able to evade income tax and excise duties, although also restricted from importing. See the original report for further information on classifications (Department of Supply & Development, Government of Pakistan, 1961).

5. For example, Aftab & Rahim (1986) document the growth of tubewell production in the Punjab, an industry which could not have been so successful if re-rolled steel had not been available.

6. The bulk of imports used to come from the United States, but now originate in the Gulf. Transportation costs are lower, and their initial price is less. For example, the going rate in 1980 for a ton of scrap from New York was $70.00; from the Gulf it was only $20.00

7. This, as noted in Chapter Two, is serendipitous, as the latter two qaums have no historical ties with iron or steel manufacturing.

5

The Sialkot Sporting Goods Industry

At this juncture, we turn to the experiences of entrepreneurs in an industry which is an exception to Punjabi industrial norms, that of the export-oriented, cottage-based sporting goods industry in Sialkot. It is exceptional because it developed exclusively within one city by local craftsmen-turned-industrialists and built upon an existing industrial culture. Accounting for nearly two percent of Pakistan's exports, its model of development is instructive for other industries emerging both within Sialkot and elsewhere in the country today.

The growth of labor-intensive export-oriented industries has been shown to be critical in the development experiences of many semi-peripheral countries, particularly Taiwan, South Korea and Brazil.[1] However, this mode of organization has rarely been adopted in Punjab. Political and economic conditions in pre-Independence Punjab (especially those affecting Muslims) did little to foster industrial patterns which contributed to the development of exportable consumer products industries. The experiences of the sporting goods industry, whose history dates back over a hundred years, makes it an important exception.

Sporting goods has become so important to Sialkot that it has virtually transformed the city. Out of a total population of 350,000, an estimated 25,000 (14%) are actively employed in this field. The Fifth Five-Year Plan (1978-83) estimated that there were 714 small-scale units and 18 large ones in operation in January 1978.[2] In addition to these figures, there are countless unregistered units comprised of two or three workers each.

The northeastern area of the Punjab, in which Sialkot is located, has a long history of manufacturing wood and leather products. G.S. Chhabra notes that by 1882, the wood carvers of Bhera, Chiniot and Bhiwani were famous for their architectural work. Other areas were well known for their expertise in making furniture, notably ivory inlaid in wood (mainly *chaukis*, octagonal tables) and lacquer work on village furniture (*piris*, short high-backed chairs, and bed frames). The hilly regions of the Punjab were surrounded by abundant

forests, while the plains areas had vast quantities of brushwood. The sub-mountainous district of Sialkot had ideal climatic conditions for both woodworking and leather goods to flourish. The Sialkot woodworker was credited with being good at his skill, and when Europeans would show particular furniture patterns, Chhabra (n.d.:221) records that "a very fair imitation could be turned out".[3]

Interestingly, the history of the sporting goods industry has taken on near-mythological dimensions. Many stories exist regarding who made the first sports implement, why he did so, and what that item was, ranging from a craftsman making a cricket bat for a colonel, to another one fixing a tennis racket for a priest, to an employee of the East India company needing his golf stick repaired. Mohammad Sharif Ansari, the Managing Director of the Pakistan Sports Cooperative Industrial Society, relates a colorful account of the industry's founding:

> This Sialkot is thickly populated. Land is less here, people are a lot here because they've been living here four thousand years, since the Huns first settled here because it was near the mountains. So the land is less but the population is too much. Small landowners came to predominate. They couldn't live on that land as the parcels were too small, so they learned how to read and write. The literacy rate in Sialkot is greater than the national average. My meaning here was this, that it was necessary for people here to earn their livelihood from something other than the land, so they thought about entering industry....
>
> In 1870, one Father's tennis racket broke. He was very upset that it would take a three-month journey just to get it to England so it could be fixed, and by the time it came back, his tennis game would go bad. So he went to see a furniture-maker in the bazaar. He asked him to fix it. Now this man had not done that work before--he made chairs, tables,and other things, but not tennis rackets. So he glued it and bound it. The Father gave him five rupees for fixing it, and the furniture-maker was astonished to see such a large amount for his labor. So he went to the Father's house and sat down outside and when the Father came out, he asked if he had any other bro-

> ken tennis rackets. He offered to make one for the Father, and the Father said fine, go make one. So with the help of an apprentice, he prepared one. It was a bit awkward, the shape was not quite right, but the Father--he was a good man--he was pleased, and gave the craftsman ten rupees for the racket.
>
> So now the craftsman was so happy, he was prepared to make another dozen tennis rackets. He began preparing them and delivering them, and slowly their quality improved. The Father gave him a letter, that he could go to the Lahore Cantonment and other military areas and sell them. He was able to make much money from selling the rackets. When money came, his wife started cooking things at home. When the neighbors saw smoke coming out of his chimney, they began to say that he has become rich. So they sent their women to check what his source of wealth was. He would make rackets at home, and then go out and sell them. The women came and saw what he did, and went back and told their husbands. They also started manufacturing them.

British soldiers and missionaries in various cantonment areas in the Punjab, such as Jullunder and Ambala, began sending their damaged sports items to Sialkot for mending. Tennis rackets soon became Sialkot's most demanded product, although they were still roughly shaped. Sheikh Walayat Ali, General Manager of Uberoi Cooperative Sports, the first sporting goods factory in the sub-continent, continues the story:

> The carpenter [who had repaired the missionary's tennis racket] didn't know English. At the Mission High School, the same one that Allama Iqbal went to, some Sikhs wrote letters for him. That carpenter was a Muslim, he was Ahmed Din, from Hajipur, I think. The workers were Muslims; the middlemen later were Sikhs and Hindus. Later, some Sikh teachers came into the market and bought articles from Muslim artisans. This process went on for a while.

Muslim *mistris* [craftsmen], long renowned for their woodworking skills in Sialkot district, began making tennis rackets and selling them to Hindu and Sikh middlemen, who would then send the goods throughout the subcontinent and later to England and other points within the British "empire".[4] When the railroad from Wazirabad to Sialkot became operational in 1883, it opened up more efficient export routes to the Punjab than those which had previously existed through Kashmir.

In 1888, Ganda Singh Uberoi, one of the teachers at the Sialkot Mission High School, set up Uberoi Limited with his brother, Jhanda Singh. They began as middlemen between the manufacturing Muslim craftsmen and the people they supplied. Then the Uberoi brothers began manufacturing cricket bats themselves, aided by a half dozen workers, using the local willow from the Chenab riverbanks as their chief raw material. Procuring Kashmiri willow, they expanded their production to include tennis and badminton rackets, hockey sticks, polo sticks and assorted balls. After the brothers separated and established two separate companies in 1899, Ganda Singh Uberoi began importing willow from Britain for cricket bats. In 1913, he imported a boiler engine from England, the first of its kind in the Punjab, and had all his mistris come to work in his new factory.

Within a decade, many more companies were founded along the same pattern: Sikhs and Hindus owned the factories, arranged for the raw materials and quality control, and exported the finished products while Muslim craftsmen did the actual manufacturing. Most necessary raw materials were locally available and abundant, including willow for cricket bats from Kashmir, mulberry for hockey sticks from Gujrat and Changa Manga, ashwood for tennis rackets from Kashmir and other mountainous districts, and leather for footballs supplied by scheduled caste laborers in the vicinity. The British occasionally began joint enterprises with Hindus or Sikhs, as in the case of Summer & Cox, founded in 1910.[5]

Children were sent to work at the factories at an early age as few families could afford the luxury of an education. Most children would become apprentices, working long hours to learn a craft without the use of machines. Bashir Ahmed, the seventy-five year-old founder of M. Bashir Ahmed & Sons, recounts his early experiences as a laborer:

> For three years I worked in Uberoi's factory, during my childhood. When I was a little boy, and I would have the *takhti* [writing board] around my neck, they

> would put me to work when school would finish. At that time, we continued to learn for seven years from our teachers at the factory. Then we would get six paisas a day. There weren't any machines at that time. We did everything with the teachers. After that, I learned the work of tennis rackets. My father and my *chacha* [paternal uncle] started manufacturing balls, hockey and cricket balls, at home. They manufactured them for Pioneer Sports, and later went to work for them. . . .
>
> I was the head of the wood department there, and they were the heads of the leather department. Hockey bats and tennis rackets were under me, and balls were under them. Then the machines came in, the bandsaws came in, then all the work started on the machines, such as cutting the wood. They used to balance them right. If the person playing with the racket wanted a "top-light", the craftsman would make it top-light. Now nobody makes it that way. Now that quality level of production is gone.

Few units were as large as Uberoi's or Pioneer's, the ones described by Bashir Ahmed. Most units employed between five and eight workers, for an average work-day of about fourteen hours.

Comparatively few Muslims came to own their own units before Partition. Though Muslims were becoming increasingly literate, the Hindus and Sikhs had a strong hold over the exporting networks and other middlemen activities. It is clearly not a matter of incentive but rather one of opportunity which first denied and later provided access to ownership in this industry to Muslims in Sialkot.

Post-Partition

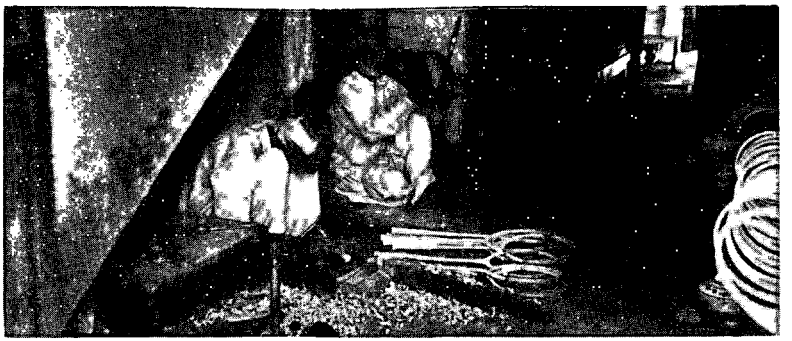
In the aftermath of Partition, the Muslim mistris found themselves without capital to procure raw materials, the acumen for quality control, or the connections necessary for exporting. There was also a severe shortage of wood, since India had claimed Kashmir. The only machinery widely in use was the bandsaw for cutting logs. During the first year, the sporting goods industry was able to export goods worth only Rs. 821,388. Business quickly picked up in the ensuing years, reaching Rs. 3,932,461 in 1948 and Rs. 7 million in 1951.[6]

Entrepreneurs in the industry claim that due to Sialkot's proximity near the Indian border, Muslim businessmen and financiers who migrated to Pakistan during Partition went elsewhere in the new country. Therefore, no one in this industry is an immigrant. The federal government apparently was also apprehensive about investing in Sialkot: there were no substantial infrastructural programs begun until the mid-1970s in the city. Though constrained by poor roads and inadequate electrical and water supplies, the industry was nonetheless able to flourish after Partition.

With few exceptions, sporting goods companies currently operating in Sialkot were started by men who had previously been laborers in another company, often Uberoi Limited. The trend seems to be that craftsmen began very small-scale manufacturing units employing two or three workers long before Partition and were able to expand their units afterwards. This differs greatly from the industrial experiences elsewhere in the country, which were initially based on industries founded just after 1947 by Muslim businessmen immigrating from India.

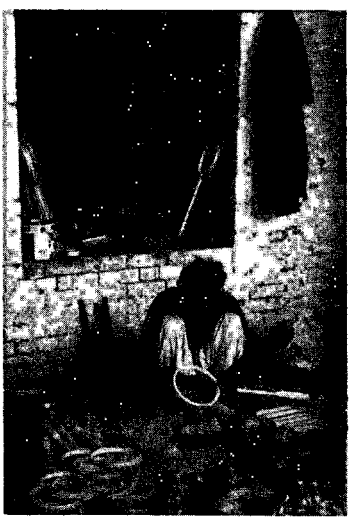
Conversely, the former Hindu and Sikh owners of sporting goods units in Sialkot who had fled to India in 1947 experienced opposite dilemmas from those of the mistris remaining in Sialkot. Many of these banias attempted to set up manufacturing units in their new homes, generally in Meerut, Ambala and Jullunder. Although they knew the techniques of procurement, standard checking and exporting, they were unable to successfully manufacture the goods themselves for at least a decade following Partition.[7]

The most popular item manufactured in Sialkot remains the tennis racket, though its importance to the industry has diminished over the last two decades due to competition from East Asia. In Sialkot, much time and care is involved in tennis racket manufacture. High-grade wood must be carved, then machinery is used for sanding and making holes for the strings. This time-consuming process takes many years to master as evidenced in the story of Bashir Ahmed. However, few workers today choose to work many years as an apprentice; they opt instead for the lure of unskilled, high-paying jobs in the Gulf. Many manufacturers, unable to compete with the combination of advanced machinery and low wages prevalent in Taiwan and South Korea, as well as constant shortages of necessary woods in Pakistan, have begun switching out of tennis racket manufacturing and over to more profitable products. Other popular items include footballs (soccer balls in the United States), hockey sticks, cricket bats, badminton rackets, gloves (ski, boxing and working), rugby balls, volleyballs, rackets (squash and paddleball), jump ropes,



Two men, owners of their own small manufacturing unit, expertly carve tennis rackets, Sialkot.

Expert craftsmanship is evident in making tennis rackets, Sialkot.



A similarly high skill level is required in making badminton rackets, Sialkot.

poker dice, cricket balls and caremboards. M.Y. Khilji of Khilji Sports explains that:

> The best items for export had been tennis rackets and footballs. But now tennis rackets have decreased, gloves have increased, football is a little bit low. But hockey sticks and cricket bats, they are improving. They're not as popular yet as tennis rackets, but the time is coming, they are in great demand.

The strongest competition in cricket bats comes from Australia and Britain, where very high standards of quality are maintained through advanced machinery. Sialkot middlemen used to get willow from Kashmir (whose willow is considered among the best in the world) for cricket bats before Partition; though the Pakistan government is now able to provide willow from Hazara, Swat and Kaghan in the northwest, the lack of willow immediately following Partition caused some units to adopt new manufacturing lines.

One such unit was Centre de Commerce. They began manufacturing hockey sticks because of the scarcity of raw materials for cricket bats and tennis rackets. After Partition, they had been able to meet the strong demand for cheaper tennis rackets from Canada and the United States, and exported millions of less expensive rackets until 1970. When stronger, quality products came into vogue, the firm switched to field hockey sticks which they are still successfully producing and exporting themselves. There is no present scarcity of raw materials for hockey sticks as Pakistan has its own mulberry tree orchards. The government recognizes the need for future availability of the wood and has encouraged more mulberry plantations.

India provides the strongest competition for Sialkot in footballs, as the quality of leather produced there is excellent. However, many firms in Sialkot have adopted the latest machinery in their manufacture, including dye-cutting holes and rounding-out the finished balls. In 1967, Anwar Khwaja Industries had their footballs approved by the F.I.F.A. (the World Federation Football Association), the first time this recognition was conferred on a Sialkot firm.

The above products are exported world-wide from Sialkot, primarily to the advanced industrial states where high quality is stressed and demanded--and can be afforded. Small quantities of goods are exported to East Asia (e.g., Malaysia, Singapore), Latin America and Africa. Because of competition from Taiwan and South Korea, they export little to Japan.

Exports amount to approximately 97% of production in this industry. The greatest increases in exports began during the early 1970s due largely to mechanization and better quality control. Appendix III provides complete export figures to 1978. In 1979, export earnings totaled over Rs. 2ll million, which was up nearly six hundred per cent from 1971 when exports had totaled about Rs. 35 million. By 1985, export earnings had more than doubled, to Rs. 496 million. This industry, solely located in one provincial city, accounted for 1.6 per cent of all-Pakistan exports in 1988. The net foreign exchange earnings between 1981--1985 are as follows:

Table V.1

Foreign Exchange Earnings of Sialkot Sporting Goods Industry (in million rupees), and as a percent of Total Exports[8]

	1981-82	1982-83	1983-4	1984-85
Net earnings	320	442	665	496
Per cent of total earned foreign exchange	1.22	1.28	1.78	1.83

The Planning Commission (1988:346) estimates that the sporting goods industry was provide an average of 1.9 per cent of the total value of exports throughout the period of the Seventh Plan (1988-93), with an average growth rate of 12 per cent.

It is interesting that other export-oriented industries in Sialkot have also developed, such as surgical instruments, musical instruments, and plastic bathroom slippers, spurred on by the sporting goods industry's success. The surgical instruments industry accounted for 1.5 per cent of all-Pakistan exports by 1988, 153 per cent over the target established in the Sixth Five-Year Plan. The sporting goods and surgical instruments industries combined, both located in Sialkot, accounted for 3.1 per cent of all exports at the beginning of the Seventh Five-Year Plan.

Increasingly, raw materials are being locally produced and technologically improved. Locally available leather used to be tanned in the traditional manner of sun-drying which, though it produced a higher quality product, took nearly two months. This very soft leather, mainly used now for the manufacture of shoes in Pakistan, is still imported by some other countries which produce a higher quality of football with it. In Sialkot, the chrome leather process, in widespread use since 1968, takes only a week to finish the leather. The nylon thread used to stitch the leather balls is also

locally available: the basic raw material, rayon, is imported and then spun and make into yarn in the Punjab.

Ashwood for tennis and squash rackets is being imported from Britain, France, Belgium and Yugoslavia. Attempts have been made at planting ashwood forests in Pakistan but with limited success. Other imported materials include cane from Singapore for hockey sticks; latex and other laminations to insure strength and elasticity from East Asia; and rubber from India, Malaysia and Sri Lanka. More machinery is used with rubber products than with most other goods. After arrival, it is processed into a form which feeds various needs within the cottage industry.

Even owners of smaller units often go abroad in search of markets, seeking out newer forms of technological innovations along the way. Since many of these industrialists have relatives who own other sports goods manufacturing or exporting units, if they personally cannot use some information which they may gain, someone else close to them surely can. Regarding his family's involvement in the industry, one factory owner acknowledges:

> We have six companies. We are five brothers, one son, and everybody controls his own firm! At any point, if he needs anything, finished goods, raw materials, he can get it from any company. Now, we export tennis rackets, they export footballs, one other exports boxing gloves and skiing gloves . . . like that.

Therefore, these entrepreneurs not only independently manufacture sporting goods, but they export them as well either alone, in small related groups, or in cooperatives. It appears that the setting up of a new unit for each male member of the family to run has become a common practice among the entrepreneurial class of Sialkot. In another instance, while Iqbal Saleemi of Hero Sports Company was discussing a strike by the cricket and hockey ball workmen in Sialkot, he noted that although his company did not manufacture these items, his brother's did. Many other owners offered similar information regarding the fact that their siblings and other close relatives were also in the field.[9] When brothers remain in the same company, tasks are divided up. For example, in one company interviewed, the eldest brother was responsible for the accounting work, the second one for correspondence, the third for quality control and the youngest went on foreign tours, selling the manufactured goods.

The size of units in this industry vary, and there is no accurate data available which covers even a majority of companies. Many industrialists speculate that the 'actual' average size of sporting units is between fifteen and twenty-five workers. 'Actual' is stressed, for this does not include people who subcontract out, a new version of cottaging out which became prevalent during the Bhutto period.

At one factory of this size, Samanda & Sons, I observed workers sitting on the ground in various sections of the factory: some were cutting leather, others were stitching volleyballs, while three men were sitting in a corner taking a break smoking a *hookah* [tobacco-filled water pipe]. The pace of work was relaxed albeit slow, resembling that observed in rural industry elsewhere in Pakistan (as opposed to that of factories in industrialized nations).

There are also countless units of two to four people who make finished products and sell them to exporters. The manufacturing area is often in the bazaar area of Sialkot known as Ramatlai. In this labor-intensive industry, such units are possible because virtually all of the work, except for parts of a few special products, is done by hand. In Ramatlai, for example, I saw various groups of men making footballs. In one shop, there were two men and a boy seated on a raised wooden platform. The boy cut leather into small pieces while the men stitched the small pieces together into footballs. When dusk came, they worked by the light of a kerosene lantern, still sitting on their wooden platform. Nearby, another group of three men and a boy were engraving insignias on brass cups for export to the Middle East. Clay was inserted into the middle of the cup to facilitate engraving the outside. All of this manual labor could have been replaced by a machine, but the craftsman's agility would remain unmatched.

Social Innovations

Small units such as these could not have prospered alone. It was only through a system of mutual cooperation coupled with social innovations that the industry was able to rapidly develop. Three central aspects of the sporting goods industry have consequences for development in Pakistan:

- the growth of private cooperatives;
- the 'cottaging out' of work;
- an emphasis on exports.

The stages of growth of this industry cannot be easily divided into periods. Rather, it is more appropriate to analyze the impact of cooperatives, the adoption of machinery, and the labor laws of the 1970s regarding its development. A very different industrial bourgeoisie has emerged in this cottage-based industry than elsewhere in the Punjab. Successful industrialists are those who have specialized in the manufacture of one or two items, but export other units' products as well. They acquire raw materials through cooperatives and often arrange to export their goods through cooperatives too.

Cooperative associations were created out of necessity to provide a network for the steady procurement of low-priced raw materials and the export of finished goods. In 1950, the Pakistan Sports Co-operative Industrial Society Ltd. was registered under the Cooperative Societies Act. Its aim was to serve as a "common facility center" to small manufacturers of sporting goods, providing its member units (initially thirty-one) with both indigenous and imported raw materials at a "nominal margin of profit".[10] The indigenous material, mainly various types of wood, was provided semi-processed. The imported material was supplied intact in the same form in which it arrived.

In the following year, 1951, another large cooperative society was formed, though with different goals. Former craftsmen from the Uberoi factory (which had been closed in the four years since Partition) approached the government with the proposal that they buy the company at auction to form a cooperative society and run the factory. The cooperative initially hired two hundred workers, a very large number for any unit in this industry. Raw materials were procured from the Pakistan Sports Cooperative Industrial Society, and were used largely to manufacture products which could not be made in people's homes such as the rubber grips for hockey sticks and the inner rubber materials for leather footballs. Later on, the cooperative began producing other finished rubber products such as cricket balls. The cooperative also provided an important export function for its members/owners, all of whom were small producers. While there were--and still are--many companies which are solely exporters, such firms purchase finished goods at low rates so as to have as great a profit margin as possible. The cooperative was beneficial to its members because, since they owned it, the "middleman fees" (the costs of running the cooperative) are substantially lower than those of the bazaar.

Technologically advanced machinery was adopted by entrepreneurs during the Ayub Khan era in the 1960s and was

increasingly promoted under Bhutto's government in the 1970s. From 1960-69, the government advanced the formation of large units in this industry through its Export Bonus voucher scheme. This scheme encouraged companies to boost productivity by using their hard currency vouchers to import machinery. The government received the foreign exchange earnings, and then gave the exporting firm an additional percentage share from the hard currency transaction. As this was very costly, only the larger firms were able to import the new machinery independently which gave them an advantage in certain areas of production. The tax rate was also very low during this time period. Iqbal Saleemi credits the government for its policy and explains how the system worked:

> They gave us some sort of injection. If we exported goods worth one hundred rupees, they gave us the incentive of an additional forty per cent. As that forty per cent was applied only to our export business, we thought it advisable to expand our business and enlarge our activities. That incentive actually infused us to go outside the country and to get the business to expand our company . . . the government was very generous with exporters.

Machinery introduced during this time in the manufacture of tennis rackets was used for sanding, making holes (in the wood for stringing), planing, cleaning and balancing. A worker in the past could make three or four rackets per day; with the new machines, a worker could produce virtually dozens each day. Spraying and pressing machines were soon adopted in the 1970s.

With the introduction of dye-cutting machinery in the football industry, the quality-level of the footballs was able to rise as the size of each panel became standardized. Hole punching machinery was also introduced, which enabled the distance between each stitch to be standardized.

Machinery began to be imported in the mid-1970s to standardize field hockey stick production. The most popular imported machinery includes spindle molders, grinding machines, and electric cutting devices. After Anwar Khwaja Industries moved to the Small Industries Estate (SIE) in the early 1970s, it engaged in a joint venture with a British firm, Grey's of Cambridge, which provided a strong boost to standardization. Grey's of Cambridge enabled Anwar Khwaja Industries to import various machines which a local company could not easily afford on its own. Spurred

Finishing footballs and checking quality at Anwar Khwaja Industries, Sialkot

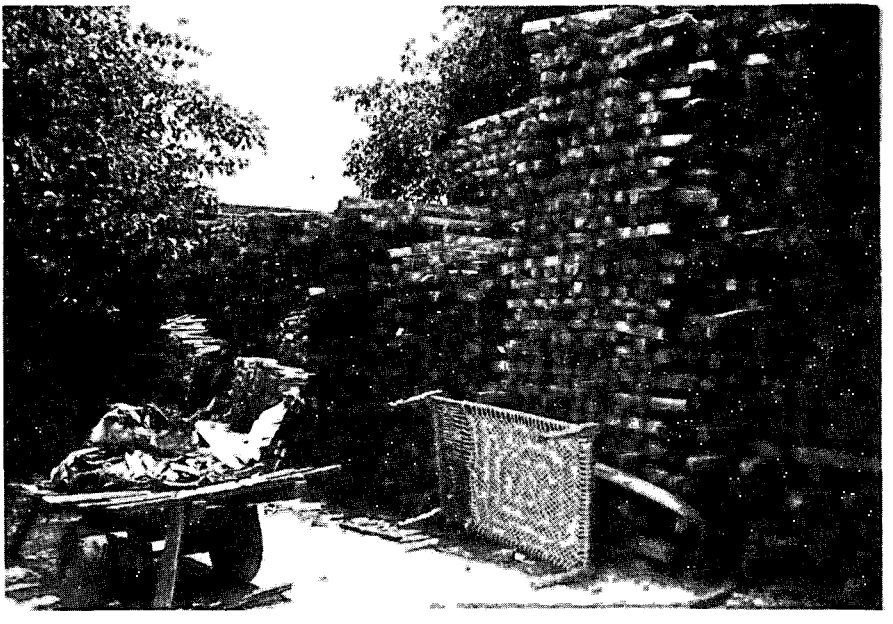
Workman making hockey sticks at Grey's of Cambridge, Sialkot

on by this competition, other large firms such as Centre de Commerce had to follow suit. Quality control became a very high priority since the units now had greatly increased capabilities.

Incentives such as the bonus voucher scheme invariably caused major changes to occur in the formal organization of industrial units. In Sialkot, social relations had historically been oriented around many men who owned small firms; Ayub Khan's policies instead encouraged the establishment of large industrial units sometimes employing hundreds of workers. Men were enjoined to come to the factory, a central place where work was conducted. The contradictory effect of this action was that while a few industries were able to prosper (as well as those firms involved in cooperatives), workers were finally able to communally assemble. Previously, there had been no network in the cottage industry whereby workers could meet among themselves. The nascent entrepreneurs had organized around the two important cooperatives mentioned above as well as the Pakistan Sports Goods Manufacturers Association, which claimed 184 members in 1980. However, the workers had each been stationed in their own homes, stitching balls, sanding rackets and planing hockey sticks. While the new machinery heightened the local units' quality control capability, thereby helping them to build up their international reputation and expand into new export markets, substantial effects were felt within the social fabric in Sialkot. When labor later endeavored to make its voice heard throughout the Punjab in the 1970s, there were many listeners in the sporting goods industry because of these changes.

The social organization of industry in Sialkot dramatically changed once again during the Bhutto period. Unions, demanding increased representation, higher pay, periodic bonuses and better working conditions, organized strikes at many of the Sialkot factories. Concurrently, the government passed a number of far-reaching labor laws designed to reform the "national economic life" in Pakistan, to balance the inequities which had developed over time.[11] The effects of these laws and increased union power in Sialkot was not what the government nor the labor leaders had intended: instead, many factory owners decentralized their operations and sent their employees home to work once again, thereby limiting opportunities for collective discourse and dissent. This was possible due to the very nature of the industry which had been highly decentralized since its inception given its labor-intensive character. About seventy-five per cent of the work must be done by hand while machinery is only necessary for such tasks as cutting

Workmen stitching cricket balls, Sialkot



Storage area for wood to be used for hockey sticks at Grey's of Cambridge, Sialkot

mulberry and willow logs, standardizing other cutting procedures, and quality control inspections.

Most of the new labor laws were inapplicable to units employing less than ten full-time workers. Amenities such as education benefits, social security, old age pensions and medical insurance only had to be given to salaried employees, not to those (now in the majority) working on a piecework basis. Factory owners rarely had to contend with labor organizations as their workers were now so dispersed. While some industrialists continued to maintain full responsibility for a variety of manufactured goods, a sizeable number began to either produce only one item at their factory or limited their company to only exporting others' finished products. One entrepreneur, explaining why he and his brothers ceased manufacturing and came to rely solely on exporting, explains:

> What we do now is that we give our goods to the actual group of manufacturers, they finish it, and return it to me. We've done this to get rid of botheration!

The Bhutto government encouraged the growth of this industry in two ways: by encouraging joint ventures with foreign firms, and by creating the Sialkot Small Industries Estate (SIE). SIEs were established throughout the country to centralize industrial productivity in certain areas. The example cited above of Anwar Khwaja Industries entering a joint venture with Grey's of Cambridge after moving to the SIE is a case in point of the advantages of locating in an SIE. SIEs enjoy steady water and electrical supplies and other benefits associated with industrial parks in the United States. Custom duty is lowered for sporting goods firms operating in the Sialkot SIE, sometimes by half. For example, if the custom duty is forty per cent, firms operating in the SIE only have to pay twenty per cent and no ceiling tax.

To provide additional incentive to relocate in the Sialkot SIE, the government instituted a Sports Service Center there. The Service Center was designed to encourage technical development and lend export assistance. For example, it imported a machine for rounding footballs which "ironed" them with heat and air pressure. No local unit could have afforded the forty thousand rupee price tag which the Service Center paid to an Italian firm. When the local manufacturers saw what the machine could do, they set their mistris to work copying the design. Now an imitation of that machine is locally produced and available for only six thousand rupees. As the

local mistris of a hundred years ago were able to copy sporting goods shown to them, those of today also seem ingeniously capable of fabricating imitations of foreign machinery as well. This technical competence has also contributed to improvements in quality control as machinery is now less costly since it can be locally manufactured.

The cottage industry has spread to a ten-mile radius of the city. Most of the work done consists of stitching (balls and gloves) and sanding. In the manufacture of hockey sticks, after the blade is roughly crafted at the factory on a locally fabricated machine, it is sent out to workers for hand smoothing. The handles, also made at the factory, are then bonded to the blade by the home-based piece-rate workers. Workers at the factory, who do the final finishing on the hockey sticks, also work on a piece-rate basis.

Some firms have scattered their production departments into groups. Each group has a leader who is responsible for taking the raw materials to the workers' homes and for bringing the semi-completed goods back to the factory where they are then cottaged out to another group of workers who finish them. In this situation, the company invests completely in each item.

Another trend is for companies to supply raw materials to workers and then collect the finished goods from them. One industrialist explains that he cottages out so much of his work now because:

> the government has been issuing so many labor laws in which factory owners have to pay lots of money for social security, old age benefits and other things. The man who is working in his house isn't covered by these laws. We can't compete with him. He is the owner, worker, supplier--there are no extra charges for him. Only that work which can't be done in the house is being done in the factories.

The inadequate transportation system in Sialkot is another cause of the marked increase in cottaging out work. The primary means of public transportation within Sialkot is tongas while buses are used outside of the city, similar to systems in other Punjabi provincial cities. Bicycles are the major private means of transportation among the laborers; cars are used extensively only among the wealthiest industrialists. A great deal of labor time is now saved for workers, who formerly would sometimes have a three to four hour commute from outlying areas over poor roads in foul weather, as one entrepreneur relates:

> In winter days, when they used to cycle down to this place, their hands were cold and much time was lost in traveling. Now we take, in our wagon, all the goods to their home and they just sit at home, stitching it. The worker's coming and going time is now saved, as well as the time spent with his hookah. Now his wife prepares it for him.

The Bhutto government's policy of exporting laborers to the Middle East so that Pakistan could earn foreign currency credits--which has become Pakistan's greatest foreign exchange earning "industry"--caused many semi-skilled and skilled workers in Sialkot to emigrate abroad in search of higher wages.[12] This has hurt some sectors of the industry, such as tennis racket production, where it takes between eight and twelve years for a worker to become a skilled craftsman. The local entrepreneurs have been forced to raise their pay scales to be somewhat competitive with those of the Middle East, making workers in this industry some of the highest paid in the country. Monthly earnings of glove stitchers avefages more than the salary of the local Deputy Commissioner of police.

Pre-arranged rates are established for the range of quality found in certain goods, particularly footballs, tennis rackets and hockey sticks. For example, the average rate for footballs, depending on grade, ranged between six and nine rupees per ball in 1980. The rate for the very highest quality was eleven rupees. However, workers can usually make only two or three very high quality footballs per day, while they can produce up to six balls daily of lesser grades.

Workers still usually start at a young age in this industry and undergo a sort of apprenticeship period, though most have had some formal schooling before they begin working. In 1986, there was still no technical school in Sialkot for training craftsmen to make sporting goods. Young boys (aged between ten and twelve) often work at simple tasks and are expected to learn a skill in two to three years. They are initially paid very little, averaging about a hundred rupees per month, which soon doubles or triples, depending on performance. At the end of their apprenticeship period, most earn about a thousand rupees monthly, approximately a third more than an experienced forger in the steel re-rolling industry in Lahore.

Members of this new industrial class consider that skilled laborers working at their factory are both dependable and loyal. In contrast, they regard unskilled laborers, such as men who clean and cut the leather for footballs or those who simply string tennis

rackets, as the most transient in the labor force and a potential liability as they tend to become active in union politics.

A pressing question is where does Islamic culture and tradition fit into the operations of this industry? Is there an "Islamic economic tradition" apparent in Sialkot? It appears not, as there is no indigenous Muslim group which historically conducted business, as has existed elsewhere such as in Lucknow, Delhi, or, to a lesser extent, Lahore. The latter were places where Muslim traders flourished and where many of the Muslim immigrants into Pakistan after Partition had their roots; Sialkot had a very different experience. Here, Muslims were artisans who were dependent on another group to enter their products into capitalist networks. The critical question here instead is how did some men stop thinking and acting like craftsmen and start to think and act like capitalists?

Interestingly, since the flight of the former entrepreneurs and the assumption of ownership by Muslims in 1947, discourse in this industry has been pragmatic, substantively removed from any sort of a religious base. While owners of units consistently reinvest profits, they continue to retain pride in the level of their products' quality. Recognizing that laborers are no longer willing to work many years at low wages as apprentices, they now rely on machinery to supplement the artisanship.

As we have seen in the previous two industries' experiences, religion--as these men consistently stated to me as well--is not as influential a factor as outsiders have often assumed. Islam does not constrain nor determine everyday business practices. It is not being reconfigured, transposed or reinterpreted in this context: it remains an important part of personal piety (to those, obviously, who are pious) while having scant interaction with the way business is conducted. Rather, instead of religion, another cultural factor blatantly stands out as principle in influencing these men's actions: kinship. Here, social actors perceive kinship somewhat differently than in the pharmaceutical or steel re-rolling industries, as most business is conducted with biological kin rather than with fictive or symbolic kinsmen.

Why has the scenario developed so differently in Sialkot than elsewhere in the Punjab? Part of the answer can be found in the historical structure of family holdings in the area. Households were physically dependent on non-agrarian labor for their sustenance since early times. Elsewhere in the Punjab, the fertility of the land--despite rural indebtedness--was enough to sustain the family unit. In Sialkot, however, small groups of biologically-related craftsmen first made tables and chairs together, then made cricket bats and tennis

rackets together. They needed to rely on one another for survival; they didn't have the luxury--as existed elsewhere in the Punjab--to take on the responsibility for and share their resources with fictive or symbolic kin as well.

In addition, these men, similar to entrepreneurs in the steel re-rolling industry, were once craftsmen themselves. But unlike the millowners, they had no secure market. Survival depended on increasing the scale of production by incorporating new machinery, thereby creating a higher quality product capable of competing in external markets. Cooperatives became a symbolic kinship network, fitting in well with Punjabi cultural orientations.

In sum, at the basic level of manufacture, small units are organized around biological kin for the family's survival, which is a unique feature of Sialkot's industrial culture. But then, for the collective survival of the industry, cooperatives based on symbolic kinship emerged. Had it not been for significant pressures placed on the industry for its basic survival--the loss of middlemen with marketing expertise; the lack of government investment in the city's infrastructure; and the necessity to fabricate high-quality goods to compete in an external market for the lack of a local one--we would perhaps instead be looking at a small craft-based industry with more similarities to steel re-rolling in terms of industrial organization and social relations of production. But given these pressures, as well as (a) the existent industrial culture emphasizing small-group survival and (b) the nature of the industry itself which makes it possible for part of the work to be cottaged out (drawing on artistic skills) and part to be done on machinery (emphasizing high quality and efficiency), we see an interesting, successful industrial transfiguration. Entrepreneurs in Sialkot borrowed methods from successful western models, devised some of their own, and have prospered from them.

Consequences and Prospects

The social background of workers in this industry is not different from those of the general population living in the Punjab: the workers belong to a variety of qaums; they generally live in extended family households; and they have lived in the Sialkot area for generations. What sets these workers apart is the higher standard of living they can enjoy compared to other workers remaining in Pakistan. Their first priority is usually to educate their children and then to raise their family's material standard of living. The social unit of the extended family does not appear to be affected by the

growth of industry in Sialkot as it is in other areas undergoing industrialization. Demands of the cottage industry do not induce the rise of nuclear families. In fact, other household members often join in the sporting goods manufacturing work when they are free from their own agricultural or social responsibilities. In this context, women will sometimes sew gloves or string tennis and badminton rackets. There is a general conservatism in the industry regarding the inclusion of women in the workforce and most men--industrialists and laborers alike--feel that as long as there are enough men available to work, there is no need for women to work.[13] Therefore, although women will sometimes help out in the production at home, they do it on an intermittent and casual basis. Their participation affects little else in their lives: it does not give them financial independence (as is the case with women employed in the pharmaceutical industry in Lahore)[14] nor does it encourage them to become literate. The general manager of the Uberoi cooperative, in comparing the impact of the growth of industry in Sialkot to the more factory-oriented industrialization occurring elsewhere in the Punjab, notes that:

> If you compare Sialkot with Gujranwala and Gujrat, there are differences. Here, the industry is based in *houses*, not factories. The labor class here has come up as owners. The women who do this work remain illiterate.

However, largely because industry in Sialkot is not based in factories, the city has not experienced the marked polarization between industrialists and workers which has surfaced elsewhere in the country. Sialkot industrialists are quick to point out that many of them were once laborers who have since been able to prosper and own their own production units, and thereby become members of this new bourgeois class. Because workers can realistically envision someday doing the same, the interclass dynamic tends to be subdued by Pakistani standards. Labor unrest still exists, but usually revolves around remunerative issues and not around workers' participation or control.

Labor relationships in Sialkot have improved since the Bhutto era as each side has come to recognize some of the needs of the other. After 1971, industrialists were hesitant about making capital investments due to labor unrest and the threat of nationalizations. While the latter fear subsided in 1977 after Zia's coup d'etat, the problem of labor unrest was largely alleviated by the increasing

migration of skilled laborers to the Gulf states. The salient labor issue has shifted to being one of competition with Middle East employers, as one industrialist argues:

> This is the thing, that Bhutto's labor policies didn't affect us as much as our competition with the Middle East. When I hire a worker, and the Middle East offers him more, he's naturally going to leave and go. If we don't give him more, he'll leave. But if we say that the Middle East has destroyed our industry, it doesn't make any sense. In the past, we were only selling labor; materials came from outside, our labor manufactured them, finished them, and they go back. So all we were putting in is labor. So now, we are exporting our labor from here also, only now in the *form* of labor. It doesn't make any difference; if we pay more money, the laborer will stay here. If we don't, then he'll go to the Middle East.

Workers' material expectations have risen due to the higher salaries available in the Middle East. As noted earlier, their first priority is to have their children become better educated so they can qualify for white collar jobs or go abroad as skilled craftsmen. The worker's second priority is to raise his standard of living, usually by starting with the purchase of a radio. Most workers in Sialkot now possess their own radios and many have television sets, which facilitates communication and awareness. More scooters, motorcycles and automobiles are also in the city, evidence of increased affluence. Sialkot now has substantial communication and transportation links with the rest of Punjab, whereas scant existed before.

There has not been much improvement in workers' housing conditions within the city. A separate area, Satellite Town, has been developed for the more prosperous residents and features "Gulberg-style" homes with hot water and flush toilets.[15] No substantial new construction has gone up for the poorer workers, mainly because most of them still live in their ancestral villages within extended families. Sprawling urban slums are one of the outcomes of development thankfully absent in Sialkot.

The Zia ul-Haq government tried to assist this industry on a number of fronts. One policy was that exporters would earn an extra fifteen per cent cash rebate on hard-currency transactions, but in local currency. This policy differed from the rebate policy in place

during Ayub Khan's period which had enabled industrialists to earn credits in negotiable currencies. The manufacturers also enjoy wood entitlements when the rate of import duty is very low, such as for cane coming from Singapore. Since the Fifth Five-Year Plan period (1978-83), the government has made low-interest loans (three per cent per annum) available to the sporting goods units from the State Bank of Pakistan. Though taxes must be paid on most imported materials (custom duties, sales taxes, etc.), when the goods are re-exported in finished form, the taxes are refunded to the manufacturer. Direct telephone dialing has also been installed for the city.

The Zia government's Islamization program appears to have had little impact on the operation of this industry. Most industrialists interviewed argued that nothing really changes with such government programs and that religious morals and conscience cannot be politically imposed. Being located in a provincial area, workers have always enjoyed the freedom to leave their work to perform ablution and daily prayers. A few years ago, after an industrialist heard that one of his workers was a *hafiz* [reciter of the Qur'an from memory], he had that man recite Qur'anic verses at the start of every workday and on special occasions. In a sense, industrial activity in Sialkot has not been totally divorced from religious observances as the actors are Muslims, but religion has had little influence on the ways in which economic actors perceive doing business. One industrialist contended that the "orthodox cynicism of mullahism"--the strict, rigid way in which certain religious leaders view and disdain western ways and changing social norms and values--can have no impact on this industry.

An important issue confronting the industry is how to maintain high quality control standards in the face of rising costs and substantial exports arranged by middlemen, not manufacturers. A change has come about in the industry in the past few years: perhaps capitalism is vying to fully replace kinship in social relations of production. Manufacturers charge that the intermediaries are more concerned with costs than with quality. They often take orders for a high-grade product but then supply one of lesser quality, thereby hurting Sialkot's reputation abroad. The intermediary agrees to a transaction with a foreign client that is less than the Punjabi supplier had demanded, and must therefore go to a different manufacturer--who makes an inferior quality product--to fill the order. Industrialists are hopeful that cooperative exporting and better machinery can guard against this corruption. Companies do try to maintain control over the quality of raw materials, even

though the production is often decentralized. Firms are adopting a variety of strict quality control measures, from increased usage of machinery (such as punching equal-sized leather panels for footballs) to burning inferior-quality goods. Every Dita hockey stick which leave Centre de Commerce is a high-quality product: mistakes are never 'dumped' on the local market but rather are incinerated. The firm recognizes the importance of maintaining its reputation and its standards.

The future for this export-oriented industry in Sialkot is presumably very bright, although a few significant obstacles must be overcome. Though some items wane in popularity on the world market, or raw materials for another are difficult to obtain, there are enough product lines being manufactured that something will always be able to be profitable. Workers migrating to the Gulf do not pose an immediate problem as enough seem to return to Sialkot after their tenure abroad to keep the labor force operational. The introduction of greater levels of mechanization, however, is perceived by many industrialists as a challenge for the industry for two reasons. First, quality control--the crucial edge which Sialkot has enjoyed over its competitors for years--is improved when machines can standardize parts. Second, if there is a renewal of labor unrest similar to that in the early 1970s, the machines will be able to operate with fewer workers running them. A repeat of the labor imbalance of the 1960s will not bode well for this industry either. The reality of the labor situation is that conflicts must subside even further, with both sides recognizing each other's needs and acquiescing to some demands, to keep the industry competitive in the world market. Third, it appears that the popularity of co-operatives is fading in Sialkot, and many have either disbanded or are in the process of disbanding. This is problematic, for the nascent success of the industry was built on cooperatives. While some individual units may reap greater profits on their own, the vibrant success of the larger industry may suffer as the indigenous strengths which this industry has been able to draw upon may no longer be relevant.

While international economic forces certainly influenced the growth of this industry, national political events today apparently have little impact, except where industrial policy is concerned. Whether Benazir Bhutto remains in office as Prime Minister or is ultimately ousted either through parliamentary or military means will most likely take a back seat to other more pragmatic, pressing issues such as competition from abroad, increased prices for raw materials and the problem of guaranteeing good quality control. At

least, as K.G. Mustafa of Anwar Khwaja Industries Ltd. told me, there will always be a market in the world for goods from Sialkot:

> Because I think, I'll tell you . . . man likes to play. That's a natural instinct. And we are playing with that instinct! We manufacture playthings!

While some of these issues have been unique to the Sialkot area, many are relevant regarding the exigencies of Pakistani industrial development. Other cities in Punjab, specifically Gujranwala and Wazirabad, are combining some aspects of the Sialkot model into their own development schemes. There is reason to believe that such a model could apply elsewhere in Pakistan--not only to the industrializing areas of Mardan and Quetta--but to more rural parts, where the combination of cooperatives, cottaging out and export emphasis could transform subsistence economies into flourishing, productive ones.

Notes

1. For example, refer to Thomas B. Gold *State and Society in the Taiwan Miracle* (M.E. Sharpe, 1986); Alfred Stepan (ed.) *Authoritarian Brazil* (Yale U.P., 1973); G. Gereffi & P. Evans "Transnational Corporations, Dependent Development and State Policy in the Semi-Periphery: A Comparison of Brazil and Mexico" in *Latin American Research Review* (Vol. 16, No.3, 1981); and L.Jones and S.I1 *Government, Business and Entrepreneurship in Economic Development: The Korean Case* (Harvard U.P., 1980).

2. Government of Pakistan "Report of the Expert Working Group on Miscellaneous and Export Industries: Industrial Subsector for the Fifth Five-Year Plan, 1978-83" (Printing Corporation of Pakistan Press, January 1978: 12). There was no criteria given for what a "large unit" consisted.

3. For further information, refer to G.S. Chhabra *Social and Economic History of the Punjab: 1849-1901* (S. Nagin & Co., Jullunder, no date). Malcolm Darling also gives an excellent account of the industrial history of this area in his *The Punjab Peasant in Prosperity and Debt* (1928). The British government had a survey conducted in the Punjab to determine which industries had development potentials. The results of this are found in A. Latifi

The Industrial Punjab: a Survey of Facts, Condition and Possibilities (Longmans, Green & Co., 1911).

4. For an early account of the reputation of the Sialkot mistress working in the sporting goods industry at the turn of the century, see *The Extracts from the District and State Gazetteers of the Punjab* (Research Society of Pakistan, Vol. II, 1977: 368).

5. After Partition, one of Summer & Cox's Muslim workers (who had initially worked for Uberoi) took over the company and renamed it Centre de Commerce.

6. Statistical Division, Government of Pakistan, 1980.

7. For further discussion on the growth of the sporting goods industry in the Indian side of the Punjab see Krishna Lal Sharma & Harnek Singh *Entrepreneurial Growth and Development Programmes in Northern India: A Sociological Analysis* (New Delhi: Abhinav Publications, 1980).

8. Source: Federal Bureau of Statistics (as printed in Akhtar, 1985:403).

9. Many men noted that due to the recent upsurge in the surgical goods industry in Sialkot, some relatives have closed out their sporting units and opened surgical ones. However, as the latter industry is organized around the same three principles of the sporting goods industry - cooperatives, cottaging out and export emphasis - the transition has been relatively easy.

10. This information is based on literature released by the cooperative on its early formation and goals.

11. There were many amendments to the national labor laws and industrial relations ordinances passed in 1972 by the Bhutto government. For further information on the scope of these laws, consult Government of Pakistan "Industrial Relations Ordinance: as Amended by Labour Laws (Amendment) Ordinance, April 1972 and Industrial Relations (Amendment) Ordinance, November 1972" (Lahore: Government Printing, 1972).

12. For further discussion of the effects of migration to the Gulf States on Pakistan, refer to Ijaz Gilani et al. *Labor Migration from Pakistan to the Middle East and its Impact on the Domestic Economy* (Islamabad: Pakistan Institute of Development Economics, Research Report Series No.126, 1981).

13. While conducting fieldwork between 1979-80, I never heard of an instance when a woman was independently hired by a company. However, in 1986, Anwar Khawaja Industries began experimenting with hiring women in their football quality control section. Now, only the women do this quality control, and work in separate rooms from men.

14. For an elaboration of how working in a pharmaceutical factory affects women's lives, refer to Anita M. Weiss "Tradition and Modernity at the Workplace: A Field Study of Women in the Pharmaceutical Industry of Lahore" *Women's Studies International Forum*, Vol. 7, No.4, 1984: 259-264).

15. Gulberg is a fashionable, affluent, western-style area on the outskirts of Lahore.

6

Culture, Class Formation, and Social Action

The foregoing has been concerned with the relationship between indigenous sociocultural orientations, class formation, and the development process in the Punjab. We have looked at various kinds of factors which have influenced individuals' decisions to depart from their previous lifestyles and enter into modern forms of industry and take up the mantle of a modern bourgeois class. As we have seen, members of each industry have based their actions on perceptions of how business should be conducted and work organized. When faced with a crisis, either concerning acquisition of raw materials, labor relations, access to markets and the like, each group discovered certain set parameters within which they could respond. These parameters are essentially a culmination of traditional orientations, government policies, transnational corporate influence and the international economy.

Limited though industrial development may be, this class--and its actions--is at the forefront of a new era. The impact of this process of industrialization and class formation is reverberating throughout Pakistani society, concomitant with demands for political and social reforms. Whether it be at the level of additional product availability and usage, union mobilization or factory ownership, traditional orientations and social relationships have become significantly transformed, resulting in a new "culture of development" in Punjab.

While cultural variables alone do not explain a country or region's development position, neither do economic transformations occur in a social vacuum. Rather, both internal and external social factors may exert a great deal of influence on how a state's economy and related institutions will develop, expand, and satisfy the needs of its people. This is especially true in the extent to which new groups of economic actors--in this case, the middle-level Punjabi bourgeoisie--can overcome obstructions imposed by established local elites, policies of the state, and other external limitations, and the way cultural identity is either reaffirmed or redefined.

The process of institutional transformation in Pakistan, as in other Third World countries, has been shown to be a complex, multidimensional feat. In some instances, this movement may be developmental (as in the pharmaceutical industry), linear (as in the case of the steel re-rolling industry), or oriented towards foreign markets (as in the sporting goods industry). The actions of those who promote this movement are critical variables, but they are not able to choose their actions freely. Rather, on the personal level, in addition to the parameters outlined above, they are also constrained by social mores, political circumstances and economic intrigues. This has resulted in the emergence of a segmented bourgeoisie which is still undergoing the process of class formation.

The three industries under analysis here are not only examples of the kinds of industries being established in Punjab--import substitution, basic manufacturing, and export oriented manufacturing--but also provide us with examples of the ways in which discourse about the process of development has progressed in the postcolonial era.

At the outset of global industrial expansion in the 1950s and early 1960s, various Western theorists argued that economic development was strongly related to the types of indigenous personalities which exist in a given area. Development would occur if those traditional personalities could be changed so as to incorporate advanced technology (and presumably the modern workplace). E.E. Hagen (1962) considered that fundamentally internal reasons determined why some societies experienced growth while others did not. In questioning the frequency with which innovators are successful in a given society, Hagen (1962:55) argued:

> that we must understand the internal structure and functioning of these societies, for both the barriers to growth and the causes of growth seem to be largely internal rather than external.

Modernization theory assumed that an evolutionary continuum exists between tradition and modernity. This contention was an outgrowth of Ferdinand Toennies' earlier gemeinschaft/gesellschaft comparison, which argued that there were characteristics which could be defined that make up traditional society, and that a new set of characteristics would develop once that society became modern.[1] Many theorists (Weiner, 1966; Finkle & Gable, 1966; Huntington, 1968) expected the "developing" countries to replicate the developed parts of the world, an idea paradoxically akin to Marx's asseveration

that "the country that is more developed industrially only shows to the less developed the image of its own future" (Marx, 1905:13). However, in opposition to Marx, they claimed that the path leading to this development would be similar to that taken by the earlier industrialized states. There would be a differentiation of social functions and the emergence of new institutions brought about by the rationalization of authority (Huntington, 1968).

When McClelland (1961) argued that man's work experience tends to make him modern or not, he could have had the steel re-rolling mill-owners in mind. Following this line of thought, Inkeles and Smith (1974:4) maintained that:

> modern institutions need individuals who can keep to fixed schedules, observe abstract rules, make judgements on the basis of objective evidence, and follow authorities legitimated not by traditional or religious sanctions, but by technical competence.

Inkeles and Smith created a package which they claimed could measure an individual's "overall modernity". But the problems with such theories are quite evident from our case studies. While personal qualities of individuals may be a contributing factor, there are many others which may overwhelm such qualities. Individual initiative was only a secondary factor in the emergence of a middle-level industrial elite in Punjab. Of greater importance were historical precedent, the availability of raw materials and skilled craftsmen, foreign assistance, the role of the government, and the influence of the global economic system.

Another criticism of modernization theory is its premise that traditional institutions are inconsistent with development. The idea that the gemeinschaft/gesellschaft continuum can be strictly applied as a measure of development is inapposite unless we identify development as tantamount to westernization. As we have seen, while entrepreneurs in the pharmaceutical industry in Lahore did adopt a western mode of industrial orientation and factory organization, those in the Sialkot sporting goods industry discovered the potential of a creative synthesis between traditional ways and industrial progress.

Both Marx and Lenin made the salient point that the development of the capitalist system resulted in an historic global transformation which intrinsically affected all societies and brought about major socioeconomic changes. This perspective forms the foundation of the dependency paradigm. Marx emphasized the expansive

nature of capitalism within a highly structured analysis of society. In his examination of pre-capitalist societies, he recognized that capital, by its nature, always endeavors to increase itself, and constantly requires additional sources of raw materials, development of new markets, and new infusions (of capital) into the market system in order to do so. Through the adoption of the bourgeois mode of production, states become compelled to destroy vestiges of feudalism and replace them with capitalist social relations.[2] Lenin argued that capitalism reached its zenith during the stage of imperialism, when the advanced capitalist countries benefitted from the rape of poorer countries' resources and cheap manpower (Palma, 1978:890-898).

Braudel (1984) traces the emergence of the modern world system back to the sixteenth century. Expanding on this research, Wallerstein (1974; 1980) shows that an interdependent world-economy developed, with the advanced states constituting the "core" and the colonized, underdeveloped areas comprising the "semi-periphery" and the "periphery" of the system.

Drawing on these structural assumptions, the dependency paradigm attempts to give a more concrete form to capitalist development in the Third World as it analyzes the kinds of specific linkages which developed between the metropolitan countries and the dependent areas. The focus is on the relationship between exogenous forces and the state, stressing the role of classes in the development of the latter. Stavenhagen (1975) outlines several problems which characterize social classes in much of the Third World:

1) They tend to be poorly structured and weak social actors;
2) The development of capitalist relations has been merely a differentiation within feudal (or semi-feudal) relations;
3) Dependency sets limits on autonomous class actions;
4) Traditional institutions (e.g., family organization, law, religion) tend to resist change, but traditional social classes do not, especially as they have already been modified by colonialism;
5) Class fragmentation abounds, along lines generally determined by relationships to international capitalism, as opposed to being a response to internal situations.

Though there are different strains within the dependency paradigm (Amin, 1979; Evans, 1979; Frank 1979), the unifying factor is the recognition of the existent dependent relationship in the

process of development. Cardoso and Faletto (1979) analyze the dependent development which occurred in Brazil as having been based on a "core-oriented" frame of reference in that technological advancements were generally confined to the consumer goods industries. Transnational corporations had taken control of such industries while the state was responsible for the heavy and capital goods industries. The latter were dependent on the introduction of technology from abroad, which was tightly controlled by foreign interests. In his earlier analysis of entrepreneurs in Brazil, Cardoso argues that:

> It is not values which condition their behavior as much as technological dependence, state intervention in the economy, and their political weakness vis-a-vis domestic and foreign actors. (from Cardoso, 1971, as quoted in Valenzuela & Valenzuela, 1978:545)

Issa Shivji (1976:19), writing on class formation in Tanzania, concludes that:

> The pattern of class divisions and the 'colonial' economic structures are indivisible. They are mutually interdependent.

As we have seen, particularly in the development of the pharmaceutical industry, the role played by the state as well as by foreign corporations is central and decisive. Indigenous actors are bound in their actions by the limitations imposed on them by both the external sources of capital and technology as well as by their own government, eager to appease foreign benefactors. Industrial transformation occurs, but within the demands of the global economic system.

Important questions regarding industrial development and class formation in the postcolonial state remain which are not adequately addressed by either of the theoretical frameworks outlined above. Is industrialization a cause or an effect of changes in the indigenous social structure? How can we account for the ways in which different segments of an industrial bourgeoisie have emerged in one geographical area, namely, the Punjab?

Entrepreneurs in the pharmaceutical industry were instrumental in its growth, each group orienting its actions and ideology to a new set of contingencies. What can we analyze as being the sociocultural

influences on this successful activity? For one, entrepreneurs in the initial period came from mercantile backgrounds, had few if any local ties, and were hindered by the powerful landowning families from penetrating their midst. Supporting a precarious new state did not disrupt other aspects of their lives. They had already taken substantial personal risks in migrating to Pakistan, and so (to them) had virtually nothing to lose. To their advantage, they generally found themselves relying on family members who had also migrated and were in similar situations, enabling higher levels of personal trust to evolve than do under usual circumstances. Family ties proved important to these men from trading backgrounds, followed by regional and qaum identities. Previous political influence, social status, and Islamic sensibilities were essentially irrelevant at this juncture.

However, in a later period, we find very different conditions conducive to success in this field. For example, entrepreneurs who established pharmaceutical manufacturing units in Lahore merely a decade later came from noticeably different backgrounds. These men were, by in large, prompted to enter the industry by their knowledge and experience which was acquired during the ascendancy of the first group. Substantial competition from transnational pharmaceutical firms who had entered into joint ventures and manufacturing license agreements with early entrants created more difficult circumstances for the newer units than the first group had faced. In sum, this industry experienced a form of dependent development. However, to overcome this, new entrants at each stage either had to be better educated technically or had to employ significantly more technology, an increasingly critical factor for success, than did their predecessors. A completely new industrial identity came to be shaped by successful entrepreneurs in this field.

Max Weber (1963) has argued that while the economic ethics of Chinese religion embodied virtually all the elements necessary for the nascent development of capitalism, it lacked a sense of tension with the world which would propel the Confucian--as it did the Calvinist--into an obsessive preoccupation with economic expansion. The steel re-rolling industry apparently also lacked this tension, as there was no provocation for change as in the pharmaceutical and sporting goods industries. While traditional actors in the sporting goods industry were faced with certain ruin if they didn't innovate their manufacturing process and reorganize their labor, such constraints were not faced by actors in basic manufacturing industries such as steel re-rolling. Whether a more educated, innovative bourgeoisie's entrance would have altered the steel re-rolling industry's

path of growth is problematic, for there still would have been a shortage of raw materials and a hungry market, thereby reinforcing the maintenance of a limited scale of production. This industry typifies that of a necessary, basic industry in many Third World countries: it has emerged out of the industrial foundations historically present in the country (traditional iron and steel craftsmanship) and the elite within it have not changed their sociocultural orientations nor their ways of doing business to an appreciable extent. There has been minimal innovation, minimal reinvestment of profits to increase efficiency and output, and minimal attempts to incorporate new forms of technology or labor organization. In essence, a bourgeoisie has emerged in this field closely aligned with traditional orientations towards life and technology--unlike in the pharmaceutical field--and one which has not appropriated any new sort of dynamic redefinition of industrial culture.

The sporting goods industry, given the expertise of its craftsmen and its international reputation, was led by a group of men who cannot easily be differentiated from the craftsmen who did not begin their own units. Yet building on traditional methods, these men adapted their units to the pressures of the international market and the domestic situation. The experiences of this industry are instructive, for while its development has historical foundations, its successful pattern is being replicated in other fields, such as in the manufacture of surgical instruments and cutlery. Here we are provided with a more promising alternative, a kind of creative synthesis of tradition, industrialization, and egalitarian organization. We find the successful reinterpretation of traditional orientations and methods as an affirmation of the region's industrial culture. Political necessities of the state only marginally affected its progress. International demand for high quality goods was a major motivating force behind the industry's transformation, though the way in which it grew was unique. It drew on an internal dynamic, which used existent cultural attitudes towards a) the extended family and other kinship relations; b) the pace of labor; c) craftsmanship; and d) small units to its advantage, as well as appropriate technology. Industry outsiders may look at the way factories are organized and deride the small units--a few men seated on the floor, working with their hands--as being "too *desi*" [of the country; traditional], but the social organization of production is clearly successful. I would argue that this kind of industrial structure, this creative synthesis of the indigenous and the imported, is of greater advantage to both workers and the national economy than are the EPZs (Export Processing Zones) which have

been set up elsewhere in Asia and have now reached the shores of Karachi.

A question which arises concerns the character of society in industrial areas: whereas certain cultural uniformities may be determined simply by the presence of a modern factory, it appears that there is certainly a role for indigenous culture to play in a nation's development. Robert Bellah's (1957) famous study of Tokugawa Japan notes the extent to which traditional Japanese institutions were able to conform, under certain circumstances, to the exigencies of industrial development. Lutz & El-Shakhs (1982) recognize the important role which tradition plays in this process today in a variety of Third World areas.

In Pakistan's economy, conformity with the indigenous culture has taken a variety of forms, from that of women factory laborers working in a separate room much akin to the traditional *zenana* [female quarters], to symbolic kinship being extended to cooperatives, and to the transformation of the banking system which has now introduced an element of risk in the "profit and loss" accounts. But other areas for such creative synthesis remain elusive.

The extent to which Islam can and should influence industrial development is problematic and highly disputed within Pakistan. There is a history of distrust between the common man and the mullah, a conflict which is exacerbated when businessmen perceive the mullahs as becoming influential in government and industry. It is precisely the absence of any particular Islamic way of conducting business in Pakistan which is striking to the observer. Although Islam is said to permeate a believer's life thoroughly, when questioned, the majority of people replied that business has nothing to do with religion. As one industrialist laconically asserts:

> Islam is not against development or modernization, and neither are the people. People love Islam, but they do not like the mullahs. Actually, the mullahs are not going to practice the *nizam-e-mustafa* [way of the Prophet], but they are going to bring in the mullah's nizam . . . the difference between the old society and the new is as much as the difference between the use of old implements and the use of modern technology. If we only hold onto our old ways in this age of science, then we will not be able to survive on the international level.

The role Islam can and should play within modern industrial culture is under dispute throughout the Muslim world, regardless of a state's political orientation. Ranging from the progressive Libyan interpretation and the Tunisian Personal Code to the opposite end of the pendulum, the conservatism of the Saudi Arabian and Iranian governments, no agreement exists.

It appears that Islam and business in Punjab have been effectively compartmentalized. Personal religiosity is important to individuals, though there is virtually no adherence by these entrepreneurs to the view that the state is the guardian of religion. Attempts by the state to develop an Islamic economic system[3] (e.g., the interest-free banking scheme; the implementation of a zakat) are not substantive departures from capitalist industrial culture, but are instead substitutes for specific aspects of it.

Tradition and Development in the 1980s

Thus far, we have seen how political influences and foreign capital in the pharmaceutical industry contributed to the transformation of simple traders into entrepreneurs hardly affected by tradition and social values. But social values proved to be a key ingredient behind the activities of entrants in the next phase. In the steel re-rolling industry, the traditional way in which work was conducted and organized has not changed much, but neither has much substantive development occurred within this field. One could argue that the lack of availability of sufficient raw materials, the low prices of imported steel goods, and the powerful competition from PECO and Ittefaq served to quell innovation and enterprise. However, there were external factors present which could have contributed to success, such as strong demand and the same political climate which encouraged other industries to prosper in the late 1950s and 1960s. In the sporting goods industry, historical precedents combined with the dynamic innovation of former laborers from similar class backgrounds joining cooperatives and incorporating a "cottage" aspect to work (thereby using kinship orientations in the process) helped this industry's success.

Needless to say, powerful domestic and international forces continue to affect Pakistan's development. Political factors (e.g., internal stresses; the Afghan crisis and ensuing refugee situation), national economic woes (e.g., the severe balance of payments deficit; the return of laborers from the Gulf without domestic employment options), and the formidable influence of transnational corporations and foreign aid have often overridden sociocultural considerations.

However, in many studies conducted through the Third World, this has generally not been the case.[4]

The current discourse on national and religious identity would appear to be a likely factor affecting development prospects. However, it seems to be occurring in an increasingly cynical environment. In the past, religion and religious orientation have been essentially irrelevant to development considerations, and it appears unlikely that they will play a more substantive role--aside from garnering favors from oil-rich Arab states--in the future. Religious orientation, however, may affect the actions of those workers who labored in the Gulf and have now returned to Pakistan with considerable capital in hand. These actors may be more observant of religious strictures in their personal lives, though how this affects their economic lives remains to be studied.[5]

Political uncertainty remains an important factor in deciding how best to prepare one's children for the future. Education is often seen as the one resource transferable anywhere in the world. Study abroad has become very popular, and is encouraged by exchange programs sponsored by organizations such as Fulbright/CIES, the American Institute of Pakistan Studies, and the new American Pakistan Research Organization's exchange with Quaid-e-Azam University. The United States Agency for International Development (USAID), through their Development Support Training Program, sponsors two types (technical and academic) of overseas participant training programs, in addition to their Private Sector Training Program. Between 1983-87, a total of 2,775 participated in USAID's overseas training programs;[6] other bilateral and multilateral assistance agencies have similar programs. When the recipients of overseas training and study return to Pakistan, in addition to bringing enhanced technical or academic knowledge, they also bring their experiences of living in a society other than their own. Twenty years ago, it was rare for an entrepreneur to have studied abroad. Today, although figures on the numbers of people who have studied abroad and returned to enter small and medium industry are unavailable, the practice is so commonplace that it is expected and almost required. This will likely prove beneficial in the rapid introduction of new technology.

Along these lines, the issue of education of daughters comes to light. Gender relations are in flux, and the government has recently embarked on an ambitious female primary education program in many parts of the country.[7] However, no female entrepreneur was interviewed for this study in the Punjab; I never met nor heard of any in the three industries under study. Though women thus far ap-

pear to have more influence in legal and bureaucratic fields, I expect that as more highly qualified, goal-oriented women enter the labor market, they may be able to exert an influence on development activities also. That Benazir Bhutto, a woman, has become the Prime Minister of Pakistan--and named five other women to ministerial positions--is a potent symbol for the country's future. Not only are women allowed but they are being encouraged to participate in public activities; we can assume there will be gradual expansion of this ideology in the future as long as Benazir remains in power.

The expansion of international media will also affect sociocultural orientations as televisions and radios are no longer the exclusive domain of the wealthy. The video-cassette boom in Pakistan is contributing to:

> the demise of classical dance and music, the collapse of all serious theatre, no development of a non-commercial cinema and a sharp decline in public concerts (Rasheed, 1986:54).

The rapid transmission of world events coupled with the dissemination of western popular culture throughout the world is another factor for consideration.[8]

This brings us to look at the extent to which Pakistan, regardless of the level of industrial development it will be able to achieve in the near future (be it channelled through Islamic institutions or not), will be able to compete internationally. Andre Gunder Frank (1979) notes that import substitution in Third World countries has now given way to export promotion, supported by ultra-repressive regimes. He views this transformation as a result of the world economic crisis, a modification in the international division of labor whose aim is to lower the costs of production. This may well be the path which Pakistani industry will follow in the future if the successes of the sporting goods and surgical instruments industries are imitated elsewhere and current moves to strengthen democratic institutions are ultimately thwarted.

It does appear that the interdependent world system will no longer allow a country to escape from the bonds of dependency. A.W. Clausen, former president of the World Bank, acknowledged that individual ideal national economies are far more inter-dependent than their governments or their people recognize.[9] Although dependent linkages remain strong between Pakistan and the advanced industrial states, entrepreneurs hold high expectations about the effects which technical innovations may have on its international

trading position. It must be mentioned that few people expect indigenous technical innovations to be significant; rather, technology is imported as much as possible.

Though a strong relationship exists between industrial growth and political institution-building, this question must be set aside for the time being in regards to Pakistan. The occurrence of the military taking power appears no longer to be the exception to the norm. Benazir Bhutto's PPP was successful only by a slim margin in the November 1988 national elections. The fledgling democracy inherited many serious problems including ethnic strife, corruption, the smuggling of arms and heroin, and a virtually bankrupt economy. It faced various political crises in its first six months in office such as the dissolution of the just-elected Baluchistan Provincial Assembly, the violent storming of the American Center in Islamabad by opposition forces protesting the publication of Salman Rushdie's book *Satanic Verses* in the United States, a political massacre in Sind, and on-going confrontations with the opposition controlling the Punjab provincial government. After eleven months in office, the government managed to remain in power after defeating a vote of no-confidence by merely twelve votes. It appears that the institutionalization of participatory democracy and other political questions are far from resolved at this time.

An external sociocultural factor of sorts which may have a formidable impact on development in Pakistan is the internationalization of capital, resulting in a new international division of labor.[10] Will the lure of jobs cause the government to create EPZs, which have a track record of unprecedented exploitation of the workforce? As problematic as piece-rate cottage labor may be, it has the capacity to retain indigenous strengths such as keeping the extended family intact, encouraging members to remain at home instead of migrating to the city, and affirming class cohesiveness and identity. Drawing on such strengths, Pakistan's development prospects may be good; ignoring them, and opting for systematized exploitation of resources and the workforce such as exists in so many areas of the world will serve to "standardize" Pakistan's position in the world system, and prevent any dynamic breakthroughs.

Notes

1. Toennies' concept is elaborated upon in W.J. Cahnman & R. Herbele (eds.) *Ferdinand Toennies: On Sociology: Pure, Applied and Empirical* (1971).

2. Shlomo Alvineri (1969) and Gabriel Palma (1978:882-889) address the theoretical contributions of Marx's writings to the dependency paradigm.

3. Weiss (1986) elaborates on the various aspects of the government's Islamization program, particularly on economic life.

4. For example, refer to Bellah, 1957; IDS Development Bulletin, 1975; Lutz & El-Shakhs, 1982; and more recently, Worsley, 1984.

5. Burki (1980b), Gilani et. al. (1981) and Addleton (1984) have addressed the impact of returnees on Pakistan's economy.

6. Source: Based on material supplied by USAID, Anita M. Weiss "An Historical Review of USAID's Social Sector Performance in the 1982-87 Country Assistance Program" (prepared for Robert R. Nathan Associates, Inc., 1988:21), which was incorporated into the DEVRES Report *U.S.Economic Assistance to Pakistan: Review of the Period 1982-87* submitted to USAID/Pakistan, April 1988.

7. For a good overview of literacy problems affecting females in the country, refer to the Women's Division *Women in Pakistan: a Statistical Profile* (Karachi: Federal Bureau of Statistics, 1985) and Anita M.Weiss "The Consequences of State Policy for Women in Pakistan" (1988). However, many obstacles confront the goal of educating girls. See, for example, M.A.Bhatti et al. *Female Teachers in Rural Pakistan: Problems and Remedies* (Islamabad: National Education Council, 1988).

8. Smith (1980) has written an interesting article on this impact.

9. Extract of a speech made to the World Affairs Council of Northern California, San Francisco, February 4, 1982.

10. Refer to Froebel (1980) for an elaboration of this phenomenon.

Appendix I:

Methodology

During 1979-80, I conducted over fifty case studies of indigenous firms in the sporting goods, pharmaceutical and steel re-rolling industries in the Punjab. These studies yielded the bulk of data on which this book is based. A lengthy selection process was developed to determine and select those industries which epitomize the different types of industrial development experienced in the Punjab.

The ten-year period between 1965-75 was selected for intensive data analysis. More recent information was included when available, but this was unfortunately sparse[1]. First, industries were categorized by the average numbers of workers employed, according to the summary statistics of the *Census of Manufacturing Industries* (C.M.I.). Those industries which had over half of both their nationwide and Punjabi units employing between 50-99 workers were initially selected for further review. However, this group proved to be a very small percentage of the total. To broaden the sphere of possible industries, the next larger category, industries employing between 20-99 workers, was utilized as these could still be considered middle range industries. These mid-sized industries are the arena in which the middle-level industrial class operates. They more adequately reflect the contemporary domain of industrial change in the country than do the smaller (though more numerous) units or the larger (though sparser) ones. The following summary statistics for 1967-68 are an example of and are consistent with the trends in the available data for the ten-year period which was reviewed:

Nearly half of all factories in Pakistan employed between 20-99 workers during this ten-year span. However, this category accounted for less than twenty per cent of all factory workers and of total production value. Though few in number, the units employing over a thousand workers employed approximately half the industrial labor force, accounted for an average one-third of production value, and were almost exclusively in operation in or near Karachi or were textile mills. The figures for the first two categories in Table AI.1 are probably grossly underreported (in terms of unit numbers) as entrepreneurs at this level of industry try to limit their interactions with the government and neither register nor respond to census inquiries whenever possible. However, the latter two categories in

Table AI.1 are probably quite valid as the government is better able to supervise the activities of larger units.

Table AI.1

Summary Statistics by Employment Size, West Pakistan, 1967-68[2]

Factories employing	# of factories	% of total	employ-ment	% of total	prod. value	% of total
Up to 19	1086	33.0	12,758	3.2	212	2.3
20-99	1597	48.6	64,606	16.2	1700	18.6
100-999	524	15.9	142,906	35.9	4382	48.0
1000 and above	82	2.5	177,956	44.7	2842	31.1
Total	3289	100.0	398,226	100.0	9136	100.0

More specifically, the C.M.I.'s most recent available breakdown of particular industries for Pakistan and the Punjab at the time I was conducting this research are included in Appendix AII. From the two tables listed there, and from a comparison of this information with data from previous years (and some, though incomplete, data up to 1975), the following three industries appeared suitable for analysis:

Table AI.2

Industries Under Consideration[3]

Name of industry	per cent employing 20-99 workers		per cent employing 50-99 workers	
	Pakistan	Punjab	Pakistan	Punjab
Manuf. of drugs & pharmaceuticals	48.6	54.9	11.4	9.8
Iron & steel basic industries	51.0	50.6	13.8	12.6
Manuf. of sporting & athletic goods	61.9	61.9	28.6	28.6

Textile and food-processing industries were not considered for analysis as they tend to be primary industries in all underdeveloped states and do not necessarily reflect the specific, unique orientations towards industrial development which are of concern here.

Though a few other industries also employed a large percentage of their workforce in this category (20-99 workers), upon reflecting

on the purposes of my research, they were excluded in favor of the pharmaceutical, steel re-rolling and sporting goods industries. These three industries constitute a cross-section of the industrial population and epitomize the types of industrial development which have occurred in Pakistan.

Pharmaceuticals, a consumer goods industry based on import substitution, was selected for intensive analysis. Although the all-Pakistan proportion for units employing between 20-99 workers was slightly less than 50%, other factors were decisive. There is the strong presence of foreign pharmaceutical firms in the country which offer substantial competition and tend to employ large numbers of workers. Secondly, little allopathic medicine is produced in Baluchistan or NWFP, so the figures from those provinces mainly include units which are producing unani medicine. The development of a western allopathic pharmaceutical industry connotates a certain type of social development as well, which can be achieved through industry and technology.

Steel re-rolling was also selected as steel is one of the most important basic industries which must be present before real growth in other sectors can occur; virtually the "life-blood" of a country. Until 1980, Pakistan had no steel mill. Therefore, only steel re-rolling mills could perform the vital task of preparing steel for various purposes. The lack of a steel mill until recently resulted in an otherwise minor industry (in the western world) assuming major proportions here. Although the larger category in which steel re-rolling mills are placed in the C.M.I. also included iron mills and foundries, it was decided that only the steel re-rolling industry would be investigated. Steel is produced from a variety of sources - imported ingots, re-melted bars from old ships or re-melted scrap - but these must be re-rolled before the steel they provide can be put to use.

Finally, the sporting goods industry was selected as this is an old, prosperous, indigenous industry undergoing much technological expansion. It has become one of Pakistan's most successful export-oriented industries and is a model for others. It is based primarily in Sialkot and has played an important role in the industrial history of the region. Its products do well in the global market and enjoy a high standing. The industry has also contributed towards easing Pakistan's substantial balance of payments deficit.

For the above three industries, certain data have been correlated from available sources. Table AI.3 provides the industrial unit totals for each of the industries by province for each of three available years:

Table AI.3:

Number of Selected Industrial Establishments by Province, for three time periods[4]

	1969-1970				
	all-Pakistan	**Punjab**	**Sind**	**NWFP**	**Baluchistan**
Pharmaceuticals	97	58	35	–	–
Iron & Steel	121	90	32	–	–
Sporting Goods	20	20	–	–	–

	1970-71				
	all-Pakistan	**Punjab**	**Sind**	**NWFP**	**Baluchistan**
Pharmaceuticals	105	51	51	–	–
Iron & Steel	145	87	–	–	–
Sporting Goods	21	21	–	–	–

	1975-76				
	all-Pakistan	**Punjab**	**Sind**	**NWFP**	**Baluchistan**
Pharmaceuticals	89	37	46	–	2
Iron & Steel	144	93	51	–	–
Sporting Goods	17	16	1	–	–

The figures listed above are all underreported. This is largely due to the government not being able to exercise firm control over the collection of data as it is purely voluntary on the part of businesses to return the census forms to the Department of Statistics. If the department knows about a company's existence, it may send someone to retrieve the information. But for those many companies which they do not know about or who choose not to return the census forms, their existence goes unreported. Since there is no enforcement and there is a hesitancy on the part of most Pakistanis to provide information to the government, the response rate for these types of government surveys is very low. However, although the absolute figures as reported to the C.M.I. may be low (specifically the ones dating from after the mid-1970s nationalizations), the distributive proportions seem to be, on the whole, correct.

Another source, the *Directory of Industrial Establishments in the Punjab*, lists the following number of units in each industry in the Punjab in 1975[5]:

Pharmaceuticals	60
Steel Re-rolling	84
Sporting Goods	49

Though these figures must also not be regarded as exhaustive, they do give a better sense of the presence in the Punjab of the three industries under review.

The number of units in each industry by district was compared from the 1970-71 C.M.I. (the only one which listed this particular information) and the *Directory* in order to locate the centers of their development in the Punjab/(See Table AI.4).

Table AI.4

Number of Establishments in Each Industry by District

	C.M.I., 1970-71				DIRECTORY, 1975			
District	Pharma	Steel	Sports	Ttl	Pharma	Steel	Sports	Ttl
Gujranwala	--	14	--	14	1	4	--	5
Lahore	33	59	--	92	40	64	1	105
Lyallpur	5	4	--	9	6	3	--	9
Multan		--	--	--	--	2	2	--
Rawalpindi	6	4	--	10	6	4	--	10
Sahiwal	--	--	--	--	--	--	--	--
Sargodha	--	--	--	--	--	--	--	--
Sheikhupura	3	3	--	6	NA	NA	NA	NA
Sialkot	--	--	21	21	--	1	48	49
Others	4	3	--	7	4	4	--	8
Total	51	87	21	169	56	84	49	190

*The *Directory* combines Sheikhupura's industrial area with Lahore district.

Although these figures far understate the real totals (as the research in Chapters Three, Four and Five reveal), they do indicate that Lahore district is far more industrialized than others in the Punjab. There are a number of infrastructural as well as historical reasons for this. Suffice it to say that there has been an historical situation of unequal development in the Punjab, with Lahore far exceeding other districts in growth. Since Partition, the number of industrial units in Lahore district has increased from 196 to 985 (503%).

The second largest increase in absolute figures has been recorded in Gujranwala, which dramatically rose from only 25 units in 1947 to 335 in 1970 (1340%). Lyallpur (now Faisalabad), Sialkot,

Rawalpindi and Multan, in descending order, are the centers of the bulk of the remainder of industrial concentrations in the Punjab.

In 1970, the C.M.I. reported that 83.4% of all licensed factories were located in these six districts. It was assumed that 77.6% of all non-licensed factories are located in these districts as well. As most industry in Pakistan is carried out either in small or medium-sized units, a trend can be seen developing in these districts toward a recapitulation of the developmental history of Lahore. To highlight this, the following table compares the average employment size of units in Lahore to those in the other five districts discussed above:

Table AI.5:

Percent Employment Size by Selected Districts

District	Small Industries (up to 20 workers)	Medium (20-99)	Large (over 100)
Lahore	49	42	9
Gujranwala	55	40	5
Faisalabad	45	43	12
Sialkot	40	49	11
Rawalpindi	40	45	15
Multan	42	33	25

Lahore is an old city which incorporates all different types of companies, whereas Gujranwala has developed industrially only since Partition. The type of development which has taken place in the latter city is primarily of mid-sized units, parallel to the more dynamic development of Lahore. To varying extents this is the situation throughout most of the Punjab. There is a significant difference in Multan, but this is due not to the pattern of industrial development (which follows that of Lahore) but to the large agri-businesses which sprung up in the district.

I decided, in consultation with Pakistani colleagues, that the bulk of this research be conducted in Lahore as it typifies and epitomizes and in fact *is* a model of the growth occurring in other districts of the Punjab (and apparently in other provinces as well). I also conducted research in Sialkot, the home of the sporting goods industry.

Over fifty owners, proprietors and Managing Directors of industrial units in the three industries participated in in-depth interviews with me. Similar interview schedules were used for each industry although no rigid questionnaire was used. As there were a

number of issues which I wanted to explore, the actual questions posed were determined more by the particular shape each interview took and which questions I considered possible to ask. Many of the men interviewed expressed considerable hesitation because of fears conditioned by the prevailing political situation of martial law in the country.

The questions were divided into three sections:

(1) Industry (concerning their own company and the industry in general), including history, the role of the government, relations with workers and future potential;

(2) Personal Background, including family/qaum history, location, individual change, etc.;

(3) Social Perspective, including views on changes in social institutions, traditional/contemporary value conflicts, the impact of Islam on industry, and other issues which brought out the comparative cultural conceptions of the relationship between industrialization and social change.

I also conducted participant observation at all the factories and occasionally held open discussions with factory workers. While my research focused on the growth of this new middle-level entrepreneurial class,the need for worker-oriented analysis is recognized and encouraged for future research.

The owners and directors come from various class and qaum backgrounds and have very different orientations towards life in Pakistan, and are clearly not a homogeneous group. So many varied perspectives contributed to a greater understanding of the situation, and to some extent may be assumed to make up for the lack of worker input. In addition, factories and cottage industries in Sargodha, Jhang and Sialkot districts were visited so as to compare contemporary industry with the more traditional forms still prevalent in less developed areas of the province.

Notes

1. The problem of data reliability surfaced often; much of the data cannot be considered to be as reliable as the quality of information one may be accustomed to in the West. Certain figures were sometimes contradictory, not all possible industrial units were included, and in certain crucial tables, especially in the C.M.I., different classifications were used in different years, thereby making comparisons difficult. All possible means for securing objectivity in this research were followed.

2. Ministry of Finance, Planning & Development, Statistics Division, Government of Pakistan *Census of Manufacturing Industries of West Pakistan, 1967-68.*

3. Ministry of Finance, Planning & Development, Statistics Division, Government of Pakistan *Census Manufacturing Industries, July 1970-June 1971.*

4. *Ibid.*, 1969-70 and 1970-71, plus particular unpublished industry reports to the Statistics Division, Ministry of Finance, Planning and Development Section, Government of Pakistan.

5. Directorate of Industries and Mineral Development, 1975. These figures proved to be low also, though much closer than the C.M.I.'s. One point to note is that only steel re-rolling units have been listed here, as that is the industry which this research addresses in detail. The iron and steel industry on the whole is included in the C.M.I. The same is true for the pharmaceutical industry; western allopathic manufacturers were separated from unani producers in the Directory (except where they overlapped), and only the former are listed here, whereas they are lumped into one group in the C.M.I. figures of the previous tables.

Table AII.1

Employment size by industries in Pakistan

	Industry	Less than 20	20-99	% of total	50-99	% of total	Over 100	Total
1.	Food manufacturing	237	184	37.6	25	5.1	68	489
2.	Beverage industries	10	4	21.1	4	21.1	5	19
3.	Tobacco manufacturing	10	8	20.5	4	10.3	21	39
4.	Textile manuf.	222	333	46.3	67	9.3	164	719
5.	Manufacture of wearing apparel	15	6	24.0	na	na	na	25
6.	Leather & leather products	26	29	45.3	9	14.1	9	64
7.	Footwear	14	9	30.0	na	na	7	30
8.	Ginning, pressing & baling of fibres	26	107	61.5	52	29.9	41	174
9.	Manufacture of wood & cork prod.(except furn.)	7	11	21.7	3	13.0	5	23
10.	Manuf. of furniture and fixtures	11	22	57.9	6	15.8	5	38
11.	Paper & paper prods.	4	12	48.0	7	28.0	9	25
12.	Printing, publishing & allied industries	74	93	50.5	19	10.3	17	184
13.	Manuf. of drugs & pharmaceuticals	30	51	48.6	12	11.4	24	105
14.	Industrial chemicals	11	19	39.6	5	10.4	18	48

15.	Other chem. products	60	58	42.6	12	8.8	18	136
16.	Rubber products	24	20	35.7	3	5.4	12	56
17.	Plastic products	20	7	23.3	3	10.0	3	30
18.	Pottery, china & earthenware		Up to 49: 8;			50-999: 4;		
19.	Manuf. of glass & glass products	3	6	25.0	3	12.5	15	24
20.	Iron & steel basic industries	48	74	51.0	20	13.8	23	145
21.	Other non-metallic mineral products	18	35	50.7	16	23.2	16	69
22.	Non-ferrous metal basic industry	5	3	37.5	na	na	–	8
23.	Fabricated metal prods. (ex. mach. & equip)	174	200	50.5	39	9.8	22	396
24.	Machinery ex. elec.	132	144	48.6	19	6.4	20	296
25.	Elec. mach., et. al	43	65	47.8	16	11.8	28	136
26.	Transport equipment	36	63	52.5	26	21.7	21	120
27.	Scientific, precision & measuring instr.	17	26	49.1	6	11.3	–	53
28.	Photographic & opt.	5	na	na	na	na	na	9
29.	Sports & ath. goods	5	13	61.9	6	28.6	3	21
30.	Other manuf.	15	25	53.2	6	12.8	7	47
31.	All other industries	na	na	na	na	na	na	9

Table AII.2

Employment size by industries in Punjab

	Industry	Less than 20	20-99	% of total	50-99	% of total	Over 100	Total
1.	Food manufacturing	61	77	44.3	12	6.9	36	174
2.	Beverage industries	--	5	50.0	na	na	5	10
3.	Tobacco manufacturing	--	na	na	na	na	na	10
4.	Textile manufacturing	109	178	50.9	31	8.9	63	350
5.	Manuf. of wearing apparel	3	--	--	--	--	--	3
6.	Leather & leather products	11	13	46.4	5	17.9	4	28
7.	Footwear	na	na	na	na	na	na	7
8.	Ginning, pressing & baling of fibres	21	75	58.6	38	29.7	32	128
9.	Manuf. of wood & cork prod. (except furn.)	na	na	na	na	na	na	9
10.	Manuf. of furniture and fixtures	5	12	60.0	3	15.0	3	20
11.	Paper & paper prods.	na	na	na	na	na	na	6
12.	Printing, publishing & allied industries	32	42	51.2	10	12.2	8	82
13.	Manuf. of drugs & pharmaceuticals	17	28	54.9	5	9.8	6	51
14.	Industrial chemicals	5	5	22.7	--	--	12	22
15.	Other chem. products	27	25	44.6	3	5.4	4	56
16.	Rubber products	10	na	na	na	na	na	26
17.	Plastic products		Up to 49: 6					6
18.	Pottery, china & earthenware	na	na	na	na	na	na	8
19.	Manuf. of glass & glass products	na	na	na	na	na	5	10

20.	Iron & steel basic industries	30	44	50.6	11	12.6	13	87
21.	Other non-metallic mineral products	7	13	44.8	5	17.2	9	29
22.	Non-ferrous metal basic industry	3	–	–	–	–	–	3
23.	Fabricated metal prods. (ex. mach. & equip)	99	156	59.1	24	9.1	9	264
24.	Machinery (ex. elec.)	112	129	49.8	19	7.3	18	259
25.	Elec. mach., et. al.	32	47	50.0	9	9.6	15	94
26.	Transport equipment	26	42	54.5	15	19.5	9	77
27.	Scientific, precision & measuring instruments	15	23	47.9	5	10.4	10	48
28.	Photographic & optical	na	na	na	na	na	na	3
29.	Sports & athletic goods	5	13	61.9	6	28.6	3	21
30.	Other manuf. industries	na	na	na	na	na	na	19
31.	All other industries	na	na	na	na	na	na	9

Appendix III

Table AIII.1

Export earnings of the Sialkot Sporting Goods Industry, 1947-1978

Year	Amount in Pakistani rupees
1947	821,388
1948	3,932,461
1949	5,000,000
1950	6,700,000
1951	7,000,000
1952	5,430,146
1953	5,629,437
1954	5,696,783
1955	8,381,163
1956	12,000,000
1957	13,000,000
1958	12,000,000
1959	11,000,000
1960	11,322,133
1961	13,172,067
1962	14,465,441
1963	15,286,065
1964	19,000,000
1965	19,403,580
1966	20,090,000
1967	22,796,000
1968	23,496,000
1969	29,014,000
1970	31,294,000
1971	35,049,000
1972	94,602,000
1973	158,306,000
1974	211,287,000
1975	186,504,000
1976	192,704,000
1977	193,762,000
1978	211,129,000

Source: Pakistan Sports Goods Manufacturers Association, which reprinted the data from the Statistical Division, Government of Pakistan.

Appendix IV

Table AIV.1

The Steel Industry in the Third World in 1979

I. Countries with integrated iron and steel facilities:

Algeria	Indonesia	Zimbabwe
Argentina	Iran	South Korea
Brazil	Mexico	Taiwan
Chile	Morocco	Thailand
Colombia	Peru	Tunisia
Egypt	Qatar	Venezuela
India		

II. Countries with some basic steel-making capacity (including small-scale rolling mills based on imported and semi-finished steel):

Angola	Guatemala	Panama
Bangladesh	Hong Kong	Pakistan
Burma	Iraq	Phillipines
Costa Rica	Jordan	Saudi Arabia
Dominican Republic	Kenya	Singapore
	Lebanon	Sri Lanka
El Salvador	Liberia	Syria
Ecuador	Libya	Tanzania
Ethiopia	Malaysia	Uganda
Fiji	Mauritius	Uruguay
Ghana	Nigeria	Zaire

III. Countries with no steel-making capacity:

Afghanistan	Grenada	Papua New Guinea
Bahamas	Guinea	Paraguay
Bahrain	Guinea-Bissau	Rwanda
Barbados	Guyana	Sao Tome & Principe
Benin	Haiti	Senegal
Bhutan	Honduras	Seychelles
Bolivia	Ivory Coast	Sierra Leone
Botswana	Jamaica	Somalia
Burundi	Kuwait	Sudan
Cameroon	Lesotho	Surinam
Cape Verde I.	Madagascar	Swaziland
C.A.Republic	Malawi	Togo
Chad	Maldives	Tonga
Comoros	Mali	Trinidad & Tobago
Congo, PR	Mauritania	U.A.E.
Cyprus	Mozambique	Upper Volta (Burkina Faso)
Djibouti	Nauru	Western Samoa
Eq. Guinea	Nicarágua	Yemen, North
Gabon	Niger	Yemen, South
Gambia	Oman	Zambia

Source: Central Intelligence Agency, National Foreign Assessment Center (1979:2).

Glossary

allopathy: western-style medicine which seeks to cure symptoms

ayurveda: ancient Hindu medicinal system based on the vedas

babu: bureaucrat

bania: local trader

Basic Democracies: 5-tiered plan for political representation introduced by Ayub Khan

burqa: two piece body veil worn by Muslim women

chador: long sheet worn as body veil by Muslim women

chai: tea with milk and spices

charpai: simple bedframe, often made of wood, strung with either jute or cotton

dada ka dada ka dada...: distant paternal forefathers

djinn: supernatural troublemaker

dupatta: diaphanous scarf worn with Punjabi dress by women

gherao: workers' demonstration which encircles the factory or office

gurdwara: Sikh temple

hadith: sayings, actions and moods of the Prophet Muhammad

haj: pilgrimage to Mecca

hakim: medical doctor in unani tibb

haram: something forbidden in Islam

hookah: tobacco-filled water pipe shared throughout the Punjab

jajmani: commonly referred to as the Indian caste system, it is based on reciprocity, denotative kinship and occupational specialization. While in theory this is an exclusively Hindu institution, in practice it is not limited to Hindus.

khaddar: homespun cloth

lohar: iron-worker; ironsmith

makru: something unclean in Islam

mandir: Hindu temple

masjid: mosque; Muslim place for prayer

mistri: laborer; craftsman; all-purpose repairman

Mughal: empire begun by Babur in 1527 and ended with Bahadur Shah Zafar's defeat by the English in 1857

muhajir: Muslim immigrant into Pakistan from India following Partition

muhalla: local neighborhood
nauker: servant; worker
nawab: princely title
nizam-e-mustafa: the system (or way) of the Prophet (mustafa)
pansari: preparer of unani medicines
pir: Muslim religious leader
purdah: female seclusion; the separation of the world of women from that of men
qaum: tribe
qazi cap: small, black pill-box type hat often worn by South Asian Muslims
raj: reign or rule
rehra: horse-drawn cart
riba: usury
salariat: Hamza Alavi's (1986) term for Muslim merchants who came from various parts of India preceding 1947
shalwar kameez: long shirt and baggy pants worn by Punjabis
taviz: amulets containing Qur'anic verses either in the form of letters or numbers
tehsildar: government overseer of tehsil, sub-district
Twenty-two families: industrial elite of Pakistan, concentrated in Karachi
'ulema: Muslim religious scholars
unani tibb: Islamic medicinal system elaborated upon by Ibn Sena
Urdu: national language of Pakistan
Uttar Pradesh (U.P.): province in India from which many Karachi-based immigrants came
vaid: practitioner of ayurvedic medicine
zakat: religiously-ordained alms
zamindar: large rural landowner
zenana: section of house reserved for women into which no unrelated man may enter

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