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OCCUPATIONAL PRESTIGE IN COMPARATIVE PERSPECTIVE

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1

The Division of Labor and Occupational Stratification

Men are known by their work. It is no accident that when strangers meet, a standard opening gambit is the question, "What sort of work do you do?," for this information provides the best single clue to the sort of person one is. It marks a person as "someone to be reckoned with" or as one who can be safely ignored, one to whom deference is due or from whom deference can be expected. Moreover, it permits at least crude inferences regarding attitudes, experiences, and style of life. In short, occupational roles locate individuals in social space, thereby setting the stage for their interaction with one another.

This is possible because people in all walks of life share understandings about occupations—how much skill they require, how physically demanding they are, whether they are considered men's work or women's work, and so on—but particularly about their prestige. Every adult member of society ordinarily is able to locate occupations on a hierarchy of prestige. These perceptions form part of the *conscience collective*. This permits one to rank oneself and others with respect to the social honor derived from occupational status. Of course, occupational prestige is not the only basis of rank, but it is an important one in all societies with any substantial degree of occupational role differentiation.

It is therefore important to understand the nature of occupational prestige systems: What determines the relative prestige ordering of occupations? Do the same factors operate in all societies? If not, what accounts for the differences that do exist? This book addresses these questions by studying occupational prestige hierarchies in a large number of societies, both past and present. I propose a theory that argues that prestige ultimately is rooted in power relations, and then draw upon data from diverse sources to

test the theory. In doing this I have two goals: first, to show that the theory applies to all complex societies and is not restricted to any one society or any particular type of complex society; and, second, to account for the observed similarities and differences in the prestige hierarchies of different societies.

This study reflects a particular conception of the purposes of comparative research. It seems to me that if we are to arrive at an adequate understanding of the nature of human society, we must replicate the studies made in any particular society in a large sample of societies in order to distinguish three classes of phenomena: those that are universally characteristic of human social systems; those that systematically covary across societies; and those that are unique to particular times and places. In the present context, this amounts to (*1*) establishing the extent of similarity in prestige hierarchies throughout the world, and accounting for it; (*2*) determining whether and in what way differences between societies in prestige evaluations are related to differences in other aspects of social structure, such as the level of industrialization; and (*3*) relating any idiosyncratic differences in prestige evaluations to other idiosyncratic societal characteristics, such as those associated with specific cultural patterns.

ORGANIZATION OF THE VOLUME

This book argues a particular thesis—that the relative prestige of the social roles known as occupations is essentially invariant in all complex societies, past and present, and that this must be so as a consequence of inherent features of the division of labor as it exists in all societies. Competing hypotheses—that the prestige hierarchy of each society reflects idiosyncratic cultural values, that worldwide similarity exists but only because a Western system of occupational evaluation has diffused throughout the world as an adjunct to Western hegemony, or that worldwide similarity is a consequence of the constraints imposed by an industrial structure and industrial technology—are considered and rejected.

In the remainder of the present chapter I lay the groundwork for the subsequent analysis by developing a *structural* theory of prestige determination and contrasting it to the competing *cultural* and *diffusion* theories just alluded to. The structural theory argues that the division of labor creates inherent differences in the power associated with various occupational roles wherever they are found, that these differences, in turn, create differences in privilege, and that power and privilege beget prestige. Since a similar complement of occupational roles tends to arise in all complex societies, the resulting prestige hierarchies will also be similar.

In Chapters 2–4 I establish that there is indeed a question to study, by documenting that there is a single worldwide occupational prestige hierarchy.

Chapter 2 introduces the basic data, which consist of 85 occupational prestige studies from 53 countries. This chapter will be of interest principally to those concerned with the adequacy of the data and the procedures utilized to effect comparisons. I first address the question of whether or not data generated by popular evaluations of the prestige of occupations are valid indicators of prestige in its classical sociological sense, and I conclude that they are. I then consider and reject the possibility of bias due to various noncomparabilities in the data and inadequacies in the procedures utilized to effect comparisons. Finally, I describe the procedures for coding the data and effecting the comparisons upon which the remainder of the analysis is based.

Chapter 3 reviews the evidence regarding subgroup variations in prestige evaluations within societies and concludes that there is remarkable consensus in the perceptions of members of any single society. There is virtually no evidence of systematic variation in occupational prestige evaluations on the basis of the rater's occupation, ethnicity, sex, or the date the study was conducted. In particular, students are no different from and no more Western than other groups in nonindustrialized societies. The lack of subgroup variation in prestige perceptions is important both from a substantive point of view—reinforcing the perception of prestige as a manifestation of the *conscience collective*—and from a practical standpoint, since it permits us to utilize data from nonrepresentative samples to characterize entire societies. The single exception to the overwhelming evidence of internal consensus is that in some nonindustrialized countries there appear to be regional differences in the way occupations are evaluated. In view of this, data from nonindustrialized countries that show regional variations of this sort are sometimes treated separately; as a result we have data from 60 places, rather than 53.

Chapter 4 presents the basic data comparing occupational prestige hierarchies across societies. The key finding is that occupational evaluations are fundamentally the same throughout the world, which argues against the cultural theory of prestige determination. The average intercorrelation of prestige ratings across pairs of countries is .79, with a standard deviation of .14. This level of intersocietal agreement is very high, although somewhat lower than that found by previous investigators; this is hardly surprising considering that a much larger and much more diverse set of countries is included in the present analysis. The results are extremely robust in the sense that they hardly change when various subsets of countries are considered. The same pattern holds when white-collar and blue-collar occu-

pations are considered separately, although intersocietal agreement in the rating of white-collar jobs is greater than in the rating of blue-collar jobs; this difference reflects the greater intersocietal variation in the social organization of manual than of nonmanual work.

Chapter 5 provides a partial test of the theory proposed in Chapter 1, showing that in all societies for which data are available, both past and present, occupational hierarchies are similar with respect to not only prestige but also education (an aspect of power) and income (an aspect of privilege). These characteristics are strongly intercorrelated across countries and are also strongly correlated within countries. Because past societies exhibit the same relationships among occupational characteristics as do present societies, the structural theory of prestige determination and prestige similarity proposed in Chapter 1 is strongly supported and the diffusionist theory rejected.

Chapters 6 and 7 take up the possibility that within the context of general intersocietal similarity in prestige evaluations there exist systematic intersocietal differences. The structural theory of prestige determination would suggest that differences in the social organization of work resulting from industrialization create differences in occupational prestige evaluations, and the analysis presented in Chapter 6 provides modest support for this view: More highly industrialized countries tend to be more similar to the United States in their pattern of prestige evaluations than less industrialized nations; among pairs of countries the greater the similarity in level of industrialization, the greater the similarity in prestige rankings. These patterns tend to be stronger with respect to the evaluation of manual occupations than of nonmanual occupations, which reflects the fact that the process of industrialization creates greater differences in the organization of manual than of nonmanual work. In Chapter 7 I consider the possibility that particular occupations are differentially evaluated in different societies. There is no evidence that differences in cultural values create differences in the prestige accorded particular occupations or particular types of occupations. However there is some evidence suggesting that variations in social organization that create differences in the power or privilege associated with a particular occupation in different societies create corresponding differences in prestige. So once again we have a confirmation of the structural theory of prestige determination.

Because of the basic similarity of prestige evaluations in all societies, it has been possible to construct a Standard International Occupational Prestige Scale that can be validly used to assign prestige scores to occupations in any country. Chapter 8 describes the construction and validation of the Scale, while Chapter 9 describes procedures for its use.

Chapter 10 summarizes the thesis of the book and goes on to discuss the

inevitability of occupational stratification, drawing upon evidence from societies that have deliberately tried to abolish status distinctions based on occupational roles.

The book also includes four appendixes for the convenience of research workers. Appendix A presents the Standard International Occupational Prestige Scale; Appendix B is an alphabetical index to the Scale; Appendix C provides scale scores for the occupational categories of the first edition of the International Standard Classification of Occupations and for the United States Census detailed occupational classifications of 1950, 1960, and 1970; and Appendix D presents the basic prestige data from each country utilized in the analysis. Chapter 9 discusses the Appendixes and their uses in detail.

A THEORY OF OCCUPATIONAL PRESTIGE

In this section I outline what I referred to earlier as the structural theory of prestige determination, which predicts that the prestige ordering of occupations will be fundamentally invariant in all complex societies, past or present. The theory consists of four propositions, which are outlined here and elaborated below.

First, the similarity in the "functional imperatives" faced by all societies results in a basic similarity in the specific functions that have to be accomplished. This, together with inherent limitations in possible organizational forms, results in a basically similar configuration of occupational roles in all societies beyond those of the most rudimentary size and organizational complexity. That is, a division of labor will necessarily develop and, moreover, will develop in a similar way in all societies.

Second differentation inherently implies stratification. Specialization of functions carries with it inherent differences in the control over scarce resources, which is the primary basis of stratification. These resources include skill, authority, and property, each of which functions in a somewhat different way. Together they create differential power, in the most general sense of that term. Thus, the division of labor creates a characteristic hierarchy of occupations with respect to power exercised.

Third, the power resulting from control over scarce resources creates the opportunity for, and almost invariably results in, the acquisition of special privilege; thus the basic similarity among all complex societies in the relative power exercised by various occupations creates a corresponding similarity with respect to occupational differences in privilege.

Fourth, power and privilege are everywhere highly valued, and hence powerful and privileged occupations are highly regarded in all societies.

Thus, since the division of labor gives rise to characteristic differences in power, and power begets privilege, and power and privilege beget prestige,

there should be a single, worldwide occupational prestige hierarchy. The remainder of this chapter will be devoted first to elaborating this argument and then to considering alternative explanations for the observed prestige ordering of occupations in the contemporary world.

The Division of Labor and Occupational Specialization. Here I address the question of why a division of labor arises at all and why a basically similar configuration of occupational roles arises in all complex societies. The basic factor promoting the division of labor is its efficiency. Relative to unspecialized labor, specialized labor is far more efficient. There are several reasons for this.

First, some tasks can be more efficiently performed by individuals with particular personal traits—great strength, height, agility, speed, stamina, sharpness of eyesight, intelligence, tenacity, aggressiveness, and so forth. Sporting events provide a good illustration. No crew that expected to win would allow the coxswain and the oarsman to trade roles; the one is chosen for his small size and light weight and the other for his strength. Differences in the physical traits demanded by various kinds of work are recognized by all societies in a division of labor based on age and sex; some tasks are performed exclusively by women and others exclusively by men in virtually every known society (Murdock, 1937); similarly, some activities are rigidly age stratified virtually everywhere. But physical differences are not the only ones that come into play in determining occupational capabilities. Personality differences, differences in talent, and differences in general capacity, all of which are probably as much a matter of socialization as of genetic endowment, are also important in occupational performance.

Second, most tasks require learned skills, many of which take considerable time to master. Hence, individuals ordinarily can only learn one or a few skills. This is recognized in the adage, "jack of all trades and master of none." Beyond the apprenticeship required for learning a skill, the experience gained in continuously performing it will serve to reinforce the skill. Weekend craftsmen can hardly expect to be as expert as those who perform a craft on a full-time basis; but weekend craftsmen will be more skilled than those with only intermittent and sporadic practice.

For these reasons, virtually all societies develop at least a rudimentary occupational specialization beyond the division of labor based on age and sex—even societies based on subsistence economies where the bulk of the population is engaged in agriculture or in hunting and gathering will ordinarily include some specialists, if only on a part-time basis. For example, in an isolated Mexican Mayan agricultural community where all adult males were corn farmers, there were three part-time specialized roles (Cancian, 1965): political officials, religious officials, and "curers" (traditional

healers). Among the aboriginal Maori of New Zealand, a people who lived mostly by fishing,

> Specialization in industry, though not highly developed, indubitably existed. In every Maori community there were a number of people who, through inborn skill or special training, possessed greater ability than their fellows in certain types of work. A man of this kind became a specialist, in that while not necessarily devoting the whole of his time to the one craft he made it his major interest, and was peculiarly expert therein. Such people were valuable, and were called upon by others less skilled to perform work for them. The transmission of technical and magical knowledge in closely guarded fashion, as from father to son, also tended to favor the creation of specialized crafts.
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> A point of interest is that specialization in primitive economy cannot occur so readily in the seasonal crafts. A man who is skilled in the snaring of birds, for instance, may devote himself largely to this work, but it cannot be practiced all the year round, so he must find other occupations to support himself for the remainder of the time. It is in the constant employment, for the product of which there is a continual and steady demand, that the most favorable opportunity offers for specialization. Hence it is natural to find that among the Maori the persons who really did devote the major portion of their time to one craft were makers of stone adzes, wood-carvers, house and canoe builders, and above all, perhaps, tattooers (Firth, 1929:206–207; see Udy, 1959, for additional examples from other societies).

Firth's observation about seasonal crafts permitting only limited specialization illustrates a more general point—the division of labor is limited by the ability of the social system to support specialized activity. This is, of course, the basis of Durkheim's famous theorem about the division of labor increasing with the dynamic density of a society (Durkheim, 1933:256–262). Obviously, small societies, or populations that are so loosely connected that the effective social system is the family or the hamlet, cannot support an extensive division of labor simply because there would not be enough work to occupy a specialist full-time, or enough of a surplus to provide for his sustenance. However, larger, more highly integrated societies can support an extensive division of labor. The same point is confirmed by recent work on organizational size and organizational complexity (Blau, 1973:258–270, and the studies cited therein). Large-scale organizations are able to support a much more highly developed division of labor than are small organizations.

To sum up, specialization of tasks is efficient, and for this reason a division of labor develops in all social systems large enough to support specialists. The crucial next question is whether or not, and to what extent, a *similar* set of occupational roles develops in all societies with substantial role differentiation, that is, in all complex societies.

There are two main reasons why roughly the same complement of occupational roles is found in all complex societies. First, all societies, of any

level of complexity, face the same *functional imperatives*, the same needs that must be met if the society is to survive (Aberle *et al.*, 1950). Second, complexity carries its own *organizational imperatives;* some social roles require others and some depend upon others—for example, complex organization is not possible without specialized managerial and clerical roles.

If we accept as a minimal definition of complex societies the presence of an extensive division of labor in a territorially organized state the following functional roles necessarily emerge. First, food must be grown or gathered. In most societies, both historical and contemporary, the provision of food has occupied most of the population most of the time; complex societies have only been possible when a large enough surplus could be created by the food producers to sustain nonproducers. Second, tools, clothing, housing, and other goods must be manufactured. As we have seen, these functions often require substantial skill and hence come to be performed by specialists, although in the simplest societies each family manufactures its own goods. Third, whenever there is a division of labor that extends beyond single families or local hamlets, institutionalized mechanisms for the exchange of goods and services must exist, and this gives rise to commercial or trading specialists. Fourth, societies are also cultures, with shared norms and a shared system of beliefs, lore, and knowledge about the world. In all but the simplest societies, specialized roles develop concerned with systematizing, expanding, utilizing, and transmitting the cultural heritage. In simple societies these functions tend to be restricted to interpreting the relationship between the people and the gods, passing on the lore of the tribe to successive generations, and healing the sick, and these activities tend to be performed on a part-time rather than a full-time basis. In complex societies, such roles occupy individuals full-time, and others are added: scientists and scholars, engineers, lawyers, and so on—in short, what we now refer to as the professions. Finally, all societies beyond the simplest will develop political roles to coordinate the activities of their members and to keep order. However, order implies control over the use of force, and specialized roles will ordinarily develop to enforce the authority of the political leadership against the threat of both internal and external challenges. In many societies no distinction is made between the internal (policing) function and the external (military) function, but whether or not such a distinction exists, the leadership roles are usually performed by full-time specialists.

Thus, we have in all complex societies the following sorts of roles: agriculturalists (hunting and gathering, fishing, and herding societies cannot ordinarily generate enough of a surplus to sustain complex social organization); craftsmen; traders, intellectual and cultural specialists, including clergy; political leaders; and military specialists. But social organization of

this degree of complexity generates its own pressure toward further specialization, creating two additional types of roles: managers and clerks.

Management is an inherent aspect of social organization. Wherever tasks that require the cooperation of more than one individual are to be performed, there is need for a coordinator who will see that the necessary specialists are assembled, will assign tasks, and will ensure that everything is done in the proper order. However, management is a special talent; some are clearly better at it than others. As Udy notes (1959:91), quoting from Ray's study of the Sanpoil (1933:77–82):

> Among the Sanpoil, anyone could theoretically organize a hunt, "but in each community certain men were reputed to be good hunting leaders and usually only these instigated trips. Others would have found it difficult to get followers." Preparations for the trip, starting time, and deployment of the forces were subject to the leader's direction. He selected men for each post, according to whether they were good shots or good runners.

Because management is a special talent, specialized managerial roles develop in all societies. As we shall see later, there is a natural tendency for those in positions of leadership to consolidate and institutionalize their authority, becoming firmly identified with the role. Still, in the simplest societies there is not enough demand to support full-time managerial specialists. In complex societies, however, the problems of coordination are sufficiently great that a class of full-time managers emerges. It is impossible to manage a complex territorial state without a well-developed bureaucracy, consisting of local administrators in addition to the central political authorities. Large-scale construction of palaces, temples, fortifications, and other edifices likewise requires extensive coordination of effort, as does mining, and manufacture not restricted to small local workshops. Large-scale bureaucracies also require extensive records—to ensure that taxes (in kind or in cash) are collected, that everyone does his required labor or military service, and so on. But efficient record keeping requires clerical specialists, and hence clerks are found in all complex societies.

Not only are the same broad categories of occupational roles found in all complex societies, but there are organizational imperatives that create strong tendencies for work to be similarly organized everywhere.

First, the greater efficiency of specialization tends to create a "horizontal" division of labor to the extent that the population base and social structure are sufficient to support it. Thus, in very small societies there may be house-building specialists, but in larger societies house builders will become specialized into carpenters, roofers, masons, plumbers, electricians, and so on. Among the Maori, a seagoing people, "the making of a large canoe required the services of a carpenter, flax-dresser, painter, caulker,

carver, and sail-maker," but agricultural activities were not similarly specialized (Firth, 1929:207).

Second, the greater efficiency of specialization together with a tendency for those in power to try to improve their situation—indeed, for everyone to try, but for those in power to succeed—tends to create a "vertical" division of labor insofar as the social system can support it. There is a strong tendency in complex societies to separate skilled from unskilled aspects of a given functional task into different roles. For example, hod carriers become distinguished from masons, carpenters' helpers from carpenters, registered nurses from practical nurses, and practical nurses from nursing aides. This is clearly efficient from the standpoint of the employer who must pay a higher price for the labor of the skilled specialist than for that of the semiskilled or unskilled assistant, and hence would prefer that the highly skilled specialist not perform tasks that could be performed more cheaply by others. It is also desirable from the standpoint of the skilled specialist, who is thereby freed from what is ordinarily less interesting and less pleasant work. The fact that it is less desirable from the standpoint of those who end up doing the unskilled work is of little consequence.

So far I have argued that there is a basically similar division of labor in all complex societies, as a consequence of both the functional imperatives that all societies face and the organizational imperatives common to all complex social systems; but it must be noted that this similarity holds unequivocally only with respect to general categories of work and not with respect to specific occupations. It is obvious that the specific occupations included in the labor force and the exact tasks performed in these occupations vary enormously from place to place and have changed radically over time, particularly as a consequence of technological advances in the twentieth century. For example, the wide variety of jobs dependent upon the use of electrical power simply did not exist before 1900. How, then, is it possible to talk about a uniform division of labor in all complex societies, past and present?

The answer comes in two parts. First, for any given level of technology there is a limited number of ways of accomplishing particular functions. That is, the technology itself, together with the sorts of organizational constraints discussed above, determines the number and the content of the occupational roles involved in the performance of any given function. In building an American-style house, for example, a variety of things need to be done: preparing a foundation, putting up a frame, putting on the roof, finishing the exterior and interior walls, laying the floor, putting in the plumbing and wiring. At the most rudimentary level, one or a few men may do everything. More commonly, as we have seen, the tasks are divided

among specialists. At a minimum there would be a mason, an electrician, a plumber, and a carpenter. If need be, the mason might also be the cement setter, and might even build the necessary wooden forms for his work, but one would never expect a single specialist to do both the masonry and the plumbing—the skills are too different. Similarly, the carpenter might do the roofing and lay the floorboards, but he would not do the masonry. The point is that there are only so many ways to build a house, given a particular technology, and a characteristic division of labor emerges from the nature of that technology. The same is true of farming, of fishing, of canoe building, of craft manufacture, even of science and commerce. For example, let us consider commerce. First, there is a distinction between small-scale trading and vending and large-scale wholesale trade with respect both to the activities entailed and the resources required. This produces several classes of traders, ranging from peddlers to merchant princes. Second, there is a distinction in the organization of activity depending upon the product being traded. Not only is a specialized knowledge of a particular type of goods required, but the organization of the activity varies depending upon the nature of the product. Real estate agents face one set of problems and constraints and cattle buyers quite another, but the tasks of a cattle buyer in, say, Mexico are not likely to be much different from those of a cattle buyer in Denmark. And the same is true of real estate agents in the two countries. Of course, different societies do have different needs. Fishing is not a big industry in Tibet, for example. The claim, however, is not that every occupation exists in every place, but simply that work is organized in a similar way everywhere it is performed at all.

But what about technological differences? How can we reconcile the claim of basic similarity in occupational structure with the obvious changes in technology that have been occurring continuously over time and at an accelerated pace in recent years? The answer is that the main effect of technological changes is not to introduce new functions but rather new procedures for accomplishing old functions. For example, when truck drivers replace wagon drivers, they are still performing the function of transporting goods. Although articled clerks have been replaced by junior managers, candlemakers by electrical assemblers, and copyists by typists, the division of labor, seen in a broad sense, has remained remarkably uniform.

Furthermore, when new occupational roles develop in response to technological changes, they tend to be incorporated into the occupational prestige hierarchy at a level similar to that of existing occupations entailing a comparable degree of skill, authority, or responsibility. For example, electricians, nonexistent before the turn of the century, entered the occupational

prestige hierarchy in the position they retain today, alongside other highly skilled workers (Counts, 1925; Hodge, Siegel, and Rossi, 1964). Similarly, nuclear physicists almost from the first took their place among other scientists (as soon as the public realized in even a vague way what a nuclear physicist did; see Hodge and Hodge, 1964); computer programmers and television cameramen among other technicians; telephone solicitors among routine clerical and sales workers; trailer truck drivers among semiskilled workers; and elevator operators among unskilled service workers (Siegel, 1971:Table 2).

All this is, of course, not to say that there have been no changes in the organization of work and no transformations in the type of skill required to accomplish particular functions. Indeed, there have been, with an attendant transformation of the status of the occupations involved. The shift from a craft to a factory mode of production has resulted in a bifurcation of the production force, a transformation from a system of master craftsmen, journeymen, and apprentices engaged in the production of particular products from beginning to end—which by its organization held out the promise to individual workers of eventually gaining superior status as master craftsmen—to a two-class system of highly skilled machine setters and fixers, on the one hand, and semiskilled machine tenders on the other hand. But this does not vitiate the main point—which is that the relative status position in the division of labor of highly skilled craftsmen, be they shoemakers or silversmiths or machine setters and fixers in shoe or jewelry factories, remains unchanged; and similarly, that the status of semiskilled workers, be they factory operatives or workers in handicraft shops, or for that matter teamsters or truck drivers, remains essentially constant over time.

Moreover, despite enormous technological changes, especially in this century, the organization of many functions remains relatively similar to what it was in preindustrial civilizations. A comparison of the ancient Egyptian bureaucracy (Erman, 1894:328–329) with the bureaucracy, both public and private, of mid-century America is instructive. In both cases a similar range of positions exists, from the highest ranking policymaking officials down to the most minor functionaries; and in both cases a similar range of supporting clerical roles also exists, ranging from "scribes" with considerable responsibility and independent authority, equivalent to confidential clerks or executive secretaries, down to mere copyists, equivalent to routine typists and file clerks. In the organization of work, as in architecture, form follows function.

Occupational Specialization and Differential Command of Resources. Specialization of functions into distinct occupational roles inherently gives rise to differential control over scarce and valued resources. These differences are inherent because they arise from the very nature of occupational roles, and for this reason they tend to be relatively constant in all societies where the roles are found at all. High priests tend to be powerful in all societies and peasants not to be powerful in any society. But the claim of a relatively invariant power hierarchy is not limited to the extremes; all occupations, by their very nature, entail greater or lesser control over valued resources, and hence greater or lesser power.

There are three types of resources which in combination create differences in power, defined as the ability to achieve whatever ends are desired (Weber, 1947:152). These are (*1*) knowledge and skill relevant to the performance of socially valued tasks; (*2*) control over economic resources; and (*3*) authority, or legitimate control over the activities of others. These all function in somewhat different ways, and hence need to be considered one by one.

Take knowledge and skill first. As we have seen above, occupations differ with respect to the amount of knowledge, training, or talent required for their performance. Some jobs can be done by almost anyone, with little or no preparation or training time. Others require special training or special talent. These differences are not accidental, but arise from the definition of occupational roles. One cannot be a lawyer without knowing the law, which in any complex society is complex and requires extensive training. One cannot be a clerk without being literate; an illiterate clerk is a definitional absurdity. Distinctions in the skill required to do various jobs are embedded in the language used to describe them, as in the distinction between "skilled," "semiskilled," and "unskilled" manual workers, between "certified" and "uncertified" professionals, and so on. Because differences in skill inhere in the definition of occupations, they tend to be relatively constant from place to place. Jewelers are everywhere regarded as skilled craftsmen, and porters are regarded as unskilled in all societies. But the stability of occupational differences in skill requirements is much more general than this, as will be confirmed in Chapter 5.

As Bacon noted, "*Nam et ipsa scientia potestas est.*" Knowledge itself is power. In what sense is this so? How do occupational differences in knowledge and skill requirements create differences in power? First, since specialized knowledge is a scarce resource, holders of such knowledge have an advantageous market position. They are able, in one way or another, to insist upon a higher than ordinary price for their labor. This point will be pursued in greater detail in the next section. Second, and of more direct interest at the moment, knowledge enhances mastery over the world, both physical and social. The greater one's store of knowledge, the greater one's

ability to manipulate the world to one's own advantage.[1] In this respect, general knowledge is far more valuable than specialized knowledge, because general knowledge creates the ability to cope with new and unexpected situations. For this reason, elite education is always general education; and professional and executive positions, which entail extensive high-order decision making, tend to require a broad general education, only sometimes supplemented by specific vocational training.

But specific skills, as well as general education, can also be utilized to advantage. Cancian (1965:20) notes that among the Mayan corn farmers he studied

> Within the community, according to informants, there has been a series of political leaders. Most reports indicate that there were usually two or three men who held great political power in the community. These were usually men who could speak Spanish and manipulate the Ladino world as well as maintain the respect of Zinacantecos.

Here the fact of being able to communicate with the authorities of the "outside world," the Ladinos, itself created political power, the power that derives from control of information. In this case, specialized knowledge (of Spanish) enabled certain men to assume political leadership roles. Often the position itself creates a monopoly on knowledge, and with it the power of decision making based on that knowledge, as when, for example, a priest is charged with reading the omens and deciding when they are auspicious for the beginning of the planting season or the start of the harvest.[2] The power of decision making based on expert knowledge should not be underrated, for it permeates contemporary life.

Just as occupations can be differentiated with respect to the knowledge or skill required to perform them, so too can they be differentiated with respect to the economic power their incumbents wield. Obviously, owner-

[1] For this reason, in feudal societies access to education was often restricted to the upper classes. For example, among the ancient Incas the "greatness [of the nobility] arose not merely from place and from political power, but also from superior education. When the Inca Roca founded the *Yacha-huasi* or College at Cuzco, he enunciated a great social principle, namely, 'that the children of the common people should not learn the sciences, which should be known only by the nobles, lest the lower classes should become proud and endanger the commonwealth' [Means, 1936:305]."

Consistent with this, Weber (1958:351-352) notes that the principal basis of priestly power in feudal societies was the monopolization of education by the priesthood. Where this monopolization was broken, as in ancient China and classical Greece, priestly religion was eliminated as an important institution.

[2] Chinua Achebe, in *Arrow of God* (1969), provides a vivid account of what happens in an Ibo village when a chief attempts to defy the gods by delaying the planting season. Even priestly power has its limits.

ship of land or capital carries with it enormous power, at least if the holdings are large enough; the greater the size of the holdings, the greater the power. But even small holders are powerful relative to the landless, because they are relatively free from the domination of others. In feudal societies control over land and its produce is the principal basis of the power of the aristocracy. In capitalist societies the large landowner or capitalist can manipulate the system to his own advantage, buying and selling goods and services only when terms are particularly advantageous, underselling competition to gain monopolistic control and then fixing prices, buying labor in the same self-advantageous way, and even buying, through gifts, bribes, or pressure, advantageous legislation to promote his own interests. Managers, like owners, have similar powers; indeed, it was Berle and Means' (1933) insight that in the modern world, management of the means of production has much the same consequences as ownership. Even low-level managerial decisions are concerned with the allocation of scarce resources to one sort of activity rather than another, and many occupations that are not formally classed as managerial positions also involve allocation decisions of various sorts. Purchasing agents, for example, are in a position to wield economic influence by deciding from which firm to make purchases. Even professors, by their choice of assigned textbooks and their control of research grants, wield some measure of economic power, albeit not a great deal.

Just as occupational roles differ in their control over economic resources, they tend to differ in their intrinsic authority, if authority is defined as the ability to legitimately control the behavior of other individuals. In part this derives from differences in expertise and economic power, but only in part. Political officials, for example, have important, albeit usually indirect, authority (and in some times and places have had very direct authority). Employers exercise control over the behavior of their employees, as do supervisors over their subordinates. In contrast to control over capital or material resources, which tends to be concentrated in relatively high-status positions, authority in varying degrees is relatively well spread throughout the occupational system: For example, laborers' foremen exercise some authority, because they control the activities of a gang of laborers. Similarly, truck drivers have authority over truck drivers' helpers, bricklayers over hod carriers, and so on. And of course policemen exercise substantial authority over the general population in the course of carrying out their duties. Just as with skill and economic power, the greater the authority, the greater the ability of incumbents of a position to accomplish their goals; and, just as with the other two forms of power, authority differentials are inherent in the definitions of occupations.

To sum up, I have argued that the division of labor gives rise to differences among occupations with respect to knowledge and skill, economic

control, and authority. Because these differences derive from the definition of occupational roles—the nature of the functions to be fulfilled and the tasks required to fulfill them—they will be relatively invariant across societies. We can expect that in all societies intellectual or "professional" roles will require the greatest skill and knowledge and achieve the greatest monopoly of crucial expertise, that owners and managers of land or capital will exercise the greatest economic power, and that political officials, together with managers of other enterprises, will exercise the greatest direct authority over the actions of others. In consequence, in all societies these positions enjoy the greatest privilege, as we shall see in the following section.

Power and Privilege. There are two major processes by which occupational differences in skill, authority, and economic control give rise to corresponding differences in privilege. First, these aspects of power affect the position of occupations in the labor market, driving up the price for some kinds of work relative to others. Second, differential control over scarce resources permits favored groups to maximize their own advantage, either by directly allocating to themselves an unequal share of the surplus (Lenski, 1966:44–46) or by manipulating the system to promote their special interests.

Consider market position first. Occupations that require unusual skill or talent ordinarily command superior income, simply because such skill and talent is in scarce supply relative to demand, and competition drives up its price. In addition, there tends to be great competition to secure competent personnel in those occupations requiring the exercise of great authority or involving control over substantial material resources. The more powerful an occupation, the more important that it be performed well, since the consequences of competent or incompetent performances are more telling in such occupations. For example, if a chain store manager makes a poor business decision it may cost a firm a few hundred or at the most a few thousand dollars; but a poor decision on the part of a major executive can run into millions. In the same way, the performance of lawyers is ordinarily far more consequential than the performance of law clerks. Thus law firms will compete more strenuously for lawyers than for law clerks, and will pay well enough to attract a competent staff of lawyers. The general demand for competence in fields where the consequences of performance are great drives up the average level of reward, and this in turn serves to attract individuals who might otherwise choose to do other work. The result of this process is to create a close connection between occupational power and privilege in all societies.

Of course, other factors do enter into the determination of rewards, so the relationship between power and privilege is not perfect. Some functions

are in greater demand than others, depending upon the needs of society at any particular time; and some functions are in greater demand in some societies than in others, depending upon both structural and cultural factors. For example, hunting skills will be of less importance, and hence will tend to be less well rewarded, in agricultural societies than in hunting and gathering societies. And in commercial economies, law is of particularly great importance and hence lawyers are likely to be especially highly rewarded. During wartime the military competence of generals is crucial, so good military strategists are more likely to be quickly promoted than in peacetime.

Often the willingness to pay a high price to secure particular services will depend upon the profit these services are expected to yield, as when the owner of a basketball team pays an exorbitant bonus for a star player in expectation that his presence will draw sufficiently large crowds to more than offset the bonus price. But the willingness to pay well may also involve public policy decisions to subsidize particular activities because of their "importance" to the system, as when the Soviet Union subsidizes champion chess players without regard to their purely economic value but rather to enhance Soviet prestige. To be sure, these examples may seem to be somewhat esoteric and to apply to only a small fraction of all occupations, but other examples can be found as well. Coal miners are much more highly paid relative to other occupations in Eastern Europe than in Western Europe or the United States (see footnote 4, Chapter 7), which apparently reflects a policy decision about their relative importance in these countries. Similarly, forestry workers are more highly paid relative to other positions in Sweden than they are in the United States (computed from data reported in Table 5.2), which presumably reflects the greater economic importance of logging activity in Sweden than here. In sum, because of differential demand arising from cultural values and structural conditions, we must expect some intersocietal variation in the rewards enjoyed by different occupational groups. But these differences will be relatively minor compared to those differences in occupational requisites and perquisites which are inherent in the definition of jobs and are therefore stable across time and space.[8]

The second major source of differences in the material rewards accruing

[8] The reader will note the similarity in the above argument about demand to that of Davis and Moore (1945) on the functional importance of occupations as a criterion of differential rewards. However, while there are affinities between the two notions, I want to stress that demand is ultimately an economic commodity and refers to the willingness of a social system (via its personnel who make wage decisions) to pay a higher or lower price for a particular sort of labor. While that willingness may sometimes reflect the "importance" of the function for society, it need not. For example, in capitalist societies it may reflect purely individual interests in profit maximization.

to occupational groups is that differential control over resources puts favored groups in a superior position to maximize their own advantage. They may do this in a number of ways. The principal mechanism is manipulation of the political system to secure special rights or privileges. In feudal societies, for example, differential privileges for various occupational groups are customarily embedded in law; these typically include monopoly rights over the practice of particular crafts and the sale of particular goods, differential tax bases, and even the right to claim a share of the labor and product of others. In feudal estates, the serfs typically owed the lord so many days of labor per year as well as a portion of the product of their labor; at the extreme, the special privilege of the lord included the notorious "right of the first night" with the bride of a serf. In modern society, men are held to be equal under the law and distinctions tend not to be made on ascriptive grounds. But the special privileges of occupational groups continue to exist, principally in the form of tax breaks that benefit some more than others and in the form of restrictions on competition by tariff and licensing arrangements. Obviously, the more powerful an occupational group, the greater the likelihood that it will be able to ensure that advantages are institutionalized in the law. For example, the strict licensing requirements for physicians adopted by most states may be seen as a device for restricting competition from foreign doctors as much as a procedure to ensure the maintenance of medical standards.

Second, in capitalist societies at least, control over capital ordinarily creates opportunities to accumulate personal wealth; it takes money to make money. As we have seen above, large capitalists are in a superior position to manipulate the economic system to their own advantage. But even middle-level managers often have access to wealth-enhancing information and opportunities from which ordinary workers are entirely excluded.[4]

[4] Even apart from "inside dope," which creates superior investment opportunities, executive personnel often have advantageous consumption possibilities that serve to increase their effective income—expense accounts, subsidized travel, discount purchasing privileges, and the like. This is as true in socialist as in capitalist systems. Geiger (1968:157) notes:

> As any reader of the Soviet press is aware, the privileges, and temptations, of upper class social position in the USSR are often buttressed by high political office. There are frequent complaints about government and party officials who use their influence to make special purchases, get their sons and daughters admitted to universities, and otherwise obtain exceptions to rules and favorable personal treatment. Not rarely, we may suppose, a good part of the pressure upon them comes from their families. The case of Sergei, a high official in the party and district executive committee is a good example. In the course of a short period, his wife or his mother made the following specific requests of him: (1) speak to the director of the agricultural experimental station about buying some currants that were bigger, firmer, available in thick clusters, and cheaper than those bought through the usual channels; (2) telephone the manager of a store about the purchase of a wool blouse for his wife, to avoid the "frightful queue," (3) telephone the director of the theater for the favor of seats without previous purchase of tickets; (4) arrange an exception to the hospital rule so his wife could stay there with their sick daughter.

Furthermore, executives are often in a position to negotiate the level and form of their own compensation, something lower-level personnel are almost never able to do. Of course, ordinary workers may seek to overcome their individual powerlessness by collective bargaining. Indeed, collective bargaining developed explicitly in recognition of the fact that the power of the individual worker was low relative to that of management, by virtue of management's command of capital and authority. But, even so, the relative power of occupational groups in collective bargaining situations differs depending upon their political influence, their economic power (the ability to sustain a lengthy strike), and their monopoly of essential skills. Doctors' and policemen's strikes are much more likely to be successful than garbagemen's or farm workers' strikes, simply because the former cannot be replaced by substitute labor while the latter can.

In short, occupational groups are able to convert their command of scarce resources—skill and knowledge, economic power, and authority—into material advantage both by virtue of the superior market position command of these resources provides and by virtue of the ability to directly manipulate the system that such power creates. For this reason, there is a general consistency in the skill, economic control, authority, and material reward hierarchies of occupations in all societies, and a similarity in these hierarchies across societies. As we shall see in the next section, this consistency extends to the prestige hierarchy as well.

Power, Privilege, and Prestige. Before considering the nature of the connection between power, privilege, and prestige, we must first consider what is meant by prestige. As numerous writers have recognized (Veblen, 1919:22–34; Parsons, 1954:386–392; and Shils, 1968:104–105, come to mind), man is an evaluative animal, holding some objects, ideas, and attributes to be more worthy than others; the propensity for invidious distinctions is a fundamental aspect of human nature. By *invidious* I mean exactly what Veblen (1919:34) meant,

> as describing a comparison of persons with a view to rating and grading them in respect of relative worth or value—in an aesthetic or moral sense—and so awarding and defining the relative degrees of complacency with which they may legitimately be contemplated by themselves and by others. An invidious comparison is a process of valuation of persons in respect of worth.

Of course, invidious comparisons need not be limited to persons but may be made with respect to any sort of attribute or object.[5] The important point is that the evaluation is a *moral* one, carrying a connotation of the relative *worthiness* of the attribute being judged, and is not simply a matter of taste or preference. As such, invidious comparisons reflect shared norms and values regarding the relative position of attributes in hierarchies of value. The currency of moral worth is *prestige*, known synonymously as honor, regard, respect, standing, and esteem.

But what is the basis of prestige? There is apparently a limited number of attributes that confer prestige in human societies. Shils (1968:106) defines these attributes as "deference-entitlements" and notes:

> Deference-entitlements include: occupational role and accomplishment, wealth (including types of wealth), income and the mode of its acquisition, style of life, level of educational attainment, political or corporate power, proximity to persons or roles exercising political or corporate power, kinship connections, ethnicity, performance on behalf of the community or society in relation to external communities or societies, and the possession of "objective acknowledgements" of deference such as titles or ranks.
>
> It is on the basis of the perception of these entitlements that individuals and classes or more or less anonymous individuals who are believed to possess some constellation of these entitlements are granted deference; it is on the basis of the possession of these properties that they grant deference to themselves and claim it from others. It is on the basis of simultaneous assessments of their own and others' deference-entitlements that they regulate their conduct toward others and anticipate the deferential (or derogatory) responses of others.

This list is instructive in that it includes occupational role as a separate attribute, "one of the most significant entitlements to deference [1968: 107]." Occupational roles are considered to be deference-entitlements for two reasons, according to Shils (1968:107–108).
First,

> The most esteemed occupations . . . are those which are in their internal structure and in their functions closest to the *centres*. The centres of society are those positions which exercise earthly power and which mediate man's relationship to the order of existence—spiritual forces, cosmic powers, values and norms—which legitimates or withholds legitimacy from the earthly powers or which dominates earthly existence. The highest "authorities" in society—governors, judges, prime ministers and presidents and fundamental scientists—are those whose roles enable them to control society or to penetrate into the ultimate laws and forces which are thought to control the world and human life. Occupational roles are ranked in a sequence which appears approximately to correspond with the extent to which each role possesses these properties.

[5] Kleining (1973) has shown that people are quite capable of rating the "prestige" (*sozialer status*) of foods, plants, animals, and the like, and, moreover, display considerable consensus regarding the relative prestige of the members of each of these classes.

But Shils goes on to acknowledge a second basis for differential occupational prestige (1968:108):

> Of course, occupational roles and their incumbents are also deferred to on account of certain highly correlated deference-entitling properties such as the income which the practice of the occupation provides, the educational level of its practitioners, the ethnic qualities of its incumbents, etc. . . . Nonetheless, occupational role is an independent entitlement to deference.

Actually, the deference-entitlements are probably the *primary* bases of occupational differentiation, and the charismatic qualities a *secondary* basis, if only because relatively few occupational roles entail much charisma. The charismatic basis is useful in explaining deviations from the prestige expected on the basis of the power and privilege associated with the occupation, although those occupational roles that entail great charisma also tend to involve great power and privilege.

But why should power and privilege be deference-entitlements, that is, why should they confer prestige? The answer is simple—power and privilege are universally valued in all societies. There is no society where power is not accorded respect.[6] Even in utopian societies that deny the ordinary bases of stratification there is an inexorable tendency for the leadership to be deferred to (Rosenfeld, 1951). Evidence from observations of children's games and experiments on the process of structuring newly formed groups show the same pattern (Kimberly, 1970; Leik *et al.*, 1975). This is because, as Shils notes (1968:110–111), "the exercise of power . . . is determinative of the life chances of the persons over whom it is exercised; therewith it shares in the charisma which is inherent in the control of life." Privilege is also valued in all societies, and its acquisition provides evidence of "prepotence and success [Veblen, 1919:4]." Moreover, wealth is usually a necessity for participating in the style of life that manifests central cultural values. Finally, education is inherently valued, not only as an aspect of power but because education implies acceptance and command of the central values of the society: "The educated person is one who has received the culture of beliefs and appreciations which are central in the society [Shils, 1968:110]."

If, then, occupational hierarchies of power and privilege are relatively invariant in all societies, then occupational prestige hierarchies will also be relatively invariant. Of course, prestige hierarchies will not be perfectly

[6] Interestingly, Weber (1958:78) notes that a major motivation for acquiring power is to enjoy the prestige it confers.

invariant, just as power and privilege hierarchies are not. First, insofar as the power and privilege associated with particular occupations vary across societies, so will their prestige. We will take up these "exceptions that prove the rule" in Chapter 7. Second, as we noted just above, other features of occupations in addition to power and privilege also confer prestige, and these are not necessarily invariant across societies. Still, the theory proposed here would lead us to expect substantial similarity among all complex societies in the hierarchical ordering of occupations with respect to their power, privilege, and hence prestige.[7]

ALTERNATIVE POSSIBILITIES

Before accepting the theory of occupational prestige determination just proposed, we must of course verify it empirically. This requires, first, that we show that observed data on occupational prestige hierarchies are consistent with the theory and, second, that we are able to reject alternative explanations for the observed patterns. Three main alternatives to the structural theory must be considered.

First, the prestige ordering of occupations may reflect idiosyncratic cultural values and hence may vary substantially from society to society; this is the cultural hypothesis suggested by Inkeles and Rossi (1956). While the evidence available to date (Hodge, Treiman, and Rossi, 1966) indicates a high degree of agreement between the occupational prestige hierarchy of the United States and those of a number of foreign countries, it is possible that data from a larger and more representative sample of world cultures would exhibit substantially more variation. Moreover, there has been some suggestion that residues of traditional stratification systems may influence contemporary occupational evaluations in the more traditional sectors of modern societies (Lewis and Haller, 1964). Hence, our first order of business must be to establish that there are not, in fact, substantial subcultural or cross-cultural variations in occupational prestige hierarchies.

Second, even if we establish that the occupational prestige hierarchies of

[7] It is important to distinguish occupational roles from their institutional settings. The prestige of individuals may arise from either or both, but the two are not the same. We may know that the church has greater prestige than the military, but this does not mean that a parish priest will outrank a general. Similarly, the fact that the formal class structure of ancient China distinguished four estates—gentry, farmers, craftsmen, and merchants—does not mean that an agricultural laborer enjoyed greater prestige than a wholesale trader. In this book, we are concerned solely with accounting for the relative prestige of *occupational* roles without regard to other bases of social differentiation.

all contemporary societies are fundamentally similar it is possible that this simply reflects the diffusion of a Western pattern of occupational evaluation alongside the diffusion of other aspects of Western culture. After all, there is hardly a country that has not been profoundly affected by the political and economic hegemony of the North Atlantic nations. Perhaps Euro-American perceptions of occupations were acquired along with Euro-American dress, language, and values. If this were so, it would be manifest in a pattern of worldwide similarity in occupational prestige evaluations without a corresponding similarity in hierarchies of occupational power and privilege. Some support for this possibility is to be found in the observation that even nonindustrialized countries in the contemporary world appear to evaluate occupations in the same way as highly industrialized Western nations such as the United States (Hodge, Treiman, and Rossi, 1966:320).

Third, there is an alternative diffusionist explanation. Perhaps what diffused throughout the world was not just a Western value system but a Western system for organizing production, that is, a Western division of labor and organization of work roles (Inkeles and Rossi, 1956). Indeed, we know that this is true. Virtually every nation in the world is industrializing as rapidly as it can muster the resources to do so, following the model first developed in Western Europe and the United States in the nineteenth century. The constraints in social organization created by the industrial system have led some scholars to argue that all industrial societies are basically alike (Kerr *et al.*, 1960; Inkeles, 1960; but see the critical response in Halmos, 1964). Whether or not this is so, a Western pattern of industrial organization surely would create a characteristic set of occupational roles and therefore—if we accept the argument outlined above—a characteristic hierarchy of occupations in terms of power. But differences among occupations with respect to power should, again by the above arguments, lead to concomitant differences in privilege, and hence in prestige. So the observed result would be substantial similarity in occupational hierarchies of power, privilege, and prestige in all contemporary societies, albeit greater similarity among the most industrialized societies. The contrast between this possibility, which we might label a *structural diffusion* hypothesis, and the preceding one, which we might label a *cultural diffusion* hypothesis, is in the prediction of similarity in the power and privilege hierarchies as well as the prestige hierarchy; and, further, dependence of prestige similarity upon similarity with respect to power and privilege.

Of course, the fourth possibility is the one we entertained at great length, which argues that all complex societies, and not merely industrial societies, are similar with respect to the relative power, privilege, and prestige accorded occupations. If this is true, then past societies should exhibit the

same pattern as contemporary societies; hence comparison of past and present societies provides a basis for deciding between the third and fourth hypotheses.

These hypotheses are framed in such a way as to permit at least a partial evaluation on the basis of currently available data, and such an evaluation appears in Chapters 4 through 7. First, however, it is necessary to establish the adequacy of the data, and this is the concern of Chapters 2 and 3, to which we now turn.

II

SETTING THE STAGE: DATA, METHODS, AND BASIC RESULTS

5

Explaining the Worldwide Similarity in Prestige Hierarchies

On the basis of the material presented in the previous chapters, we now know that occupational prestige hierarchies are substantially similar throughout the world. In all societies, ranging from highly industrialized nations like the United States to peasant villages in up-country Thailand, the basic pattern of occupational evaluations is the same—professional and higher managerial positions are most highly regarded, lower white-collar and skilled blue-collar jobs fall in the middle of the hierarchy, and unskilled service and laboring jobs are the least respected. The question is, then, what accounts for the worldwide uniformity in occupational evaluations.

In Chapter 1, I proposed a *structural* theory of occupational prestige, arguing that occupational systems are essentially similar in all complex societies because the division of labor creates characteristic differences among occupations in the extent of power exercised, that differences in power give rise to differences in privilege, and that differences in power and privilege give rise to differences in prestige; thus, intersocietal prestige similarities reflect intersocietal similarities in occupational power and privilege. I also considered two alternative explanations for the worldwide similarity in prestige evaluations in the contemporary world: (*1*) a *cultural diffusion* theory, which argues that a Western pattern of occupational evaluation diffused throughout the world as a consequence of the colonial expansion and economic hegemony of Western nations, but without a corresponding diffusion of a Western occupational system; and (*2*) a *structural diffusion* theory, which argues that what diffused throughout the world was a Western division of labor and organization of work, which then gave rise to a Western pattern of prestige evaluations via the processes posited in Chapter 1. How can we distinguish among these alternatives?

First, we can distinguish between the structural and cultural explanations by asking whether the structure of occupational hierarchies is similar throughout the world. If it can be shown that not only prestige hierarchies, but also hierarchies of power and privilege are essentially uniform throughout the world, this would provide powerful support for a structural explanation and against a cultural one. This is especially so if it can be shown that the same pattern of connections between power, privilege, and prestige exists everywhere, that is, that the same model of prestige determination holds in all societies. Thus, our first task is to amass data on occupational hierarchies of power, privilege, and prestige for as many societies as possible. As we shall see, a structural explanation is supported.

Thus, our second task is to distinguish between a *pure structural* explanation and a *structural diffusion* explanation. To do this requires examination of evidence for past societies, before the advent of industrialization. If it can be shown that the same pattern of occupational differentiation with respect to power, privilege, and prestige holds for nonindustrial societies, and especially for past societies that were not attempting to industrialize, then a pure structural theory would be supported; for the unique division of labor created by the industrial system did not exist before the nineteenth century at the earliest. If, on the other hand, only contemporary societies, and especially industrialized societies, display a strong connection between occupational power, privilege, and prestige hierarchies, a structural diffusion explanation will be supported. As we shall see, the available evidence favors a pure structural explanation.

This strategy of successive theory testing allows us to divide our empirical analysis into two sections: (*1*) an examination of data for contemporary societies, as a basis for deciding between cultural and structural explanations; and, given the outcome of the first, (*2*) an examination of data for past societies, as a basis for deciding between pure and diffusionist structural theories.

DETERMINANTS OF PRESTIGE IN CONTEMPORARY SOCIETIES

As is so often the case in comparative analysis, empirical data that can be used to assess the alternative theories presented above are extremely sparse. Of the three types of power discussed in Chapter 1, only one, skill, can be measured at all, and that only imperfectly and for only a limited number of societies. No measures of occupational differences in authority or economic control that are valid across nations are available at all. With respect to privilege the situation is only slightly better. For a number of countries,

average incomes of occupational incumbents are available. But we have no systematic data on other forms of privilege. Thus, in sum, limited comparative data on three attributes of occupations, one measure of power, one measure of privilege, and, of course, a measure of prestige, are available. With these we will proceed as best we can. First, I will examine the extent of intersocietal similarity with respect to skill and income, the available indicators of power and privilege. Second, I will show how skill, income, and prestige are related to one another. Before beginning the analysis, however, it is necessary to describe the pertinent data.

Skill. The amount of skill and training required by an occupation is most conveniently indexed by the amount of formal education attained by its incumbents, and this is the measure I have adopted. It must be noted that such a measure has serious deficiencies. In the first place, it fails to take account of on-the-job training, which in some occupations constitutes the principal mode of learning the trade. In some countries with limited systems of formal education, differences in the level of skill required by different occupations may not be reflected in differences in the length of formal schooling. Second, in countries with complex educational systems that route students to specialized schools early in their careers, it is often difficult to devise a satisfactory scoring system for the amount of education completed, since the completion of different types of education usually carries different social meanings. On the other hand, there are two advantages in using such a measure to index skill differences.

First, as I argued in Chapter 1, those who possess generalized skills and knowledge—however these are defined by the particular culture—tend to be better able to manipulate the environment—both physical and social—than those lacking such skills: the greater the generalized knowledge, the greater the ability to discover the solutions to particular problems as they occur. Thus, while specialized knowledge should be valued over lack of knowledge, generalized knowledge should be valued over specialized knowledge, and the possession of both generalized knowledge and specialized knowledge should be valued most of all. Since how far one advances in the formal educational system is probably the best single indicator of the acquisition of general skills, occupational differences in the average level of educational attainment of incumbents are probably reasonably adequate indicators of occupational skill differences.

The second advantage of utilizing formal educational attainment as an indicator of skill requirements is that standardized data are reasonably widely available. Many countries collect information on formal schooling and publish tabulations of educational attainment by detailed occupation as part of their census statistics. In the absence of data of this sort it is

essentially impossible to compare skill requirements for various jobs within a single country, much less across countries. Hence, census data are utilized wherever available to scale occupations with respect to educational attainment. Various summary measures are used, including mean years of school completed, percentage leaving school at the minimum age, percentage attaining a given level, and so on. While it seems to be the case that intercountry correlations are not strongly affected by variations in measurement procedures,[1] it would be unwise to interpret small differences in the size of correlations involving level of educational attainment.

Income. In contrast to skill, income is fairly easily measured. Since the concept is itself expressed in operational terms there is no difficulty in this regard. The main difficulty is the lack of data for the majority of countries. Income data are collected as part of the census inquiry in a few countries, and the best data derive from such sources. Even in such cases, however, there is some reason to doubt the accuracy of the data, since individuals not only forget many sources of income, but in many countries they are none too eager to reveal its extent for fear that information given to the census will find its way to the tax office. Nonetheless, census tabulations of income by detailed occupation are preferable to the alternative sources, which principally include enterprise wage surveys. While the accuracy of the information reported is probably greater than that collected directly from individuals, the coverage is typically relatively poor. Only individuals working for large enterprises are included, and this practice can mean excluding the bulk of the labor force in some occupations; and even for those working in covered enterprises, only wages paid by the enterprise are reported. Hence, sources of income other than the main job are omitted. Given this, census data on the average incomes of incumbents of detailed occupational categories are probably to be preferred and are used here wherever possible.

Data. Of the 53 nations for which occupational evaluations are available—and for these purposes we include the 5 places for which the criterion of occupational evaluation was something other than prestige—data on the relative educational achievements of incumbents of various occupations are available for 15 and data on average incomes are available for 11; for only 5 countries are there data for both variables.

[1] For Great Britain, data are available for two different summary measures of educational attainment—percentage leaving school at age 15 and mean school-leaving age (Great Britain General Register Office, 1956:Table 46). The correlation between the two measures is .87, and the average correlation of each of these measures with measures of educational attainment for other countries is virtually identical (.79 and .80, respectively), indicating that the same general conclusion would emerge from the use of either measure.

In order to assess the degree of intercountry similarity in occupational hierarchies with respect to income and education, it was, of course, necessary to match occupational categories across countries. This proved to be a difficult task. Census tabulation schemes are by no means comparable throughout the world, and even when they are founded on the same basic principles they tend to be idiosyncratic with respect to level of aggregation. In keeping with specific national needs, some parts of the category scheme are broken into finely detailed groups while other parts are highly aggregated. Fortunately, a fairly large number of countries based their 1960 occupational classification schemes on the category system of the first edition of the International Standard Classification of Occupations (International Labor Office, 1958a). Hence, by adopting the categories of the ISCO first edition, a reasonably adequate matching of census categories across countries could be effected.

The basic procedure was to match the lines from each detailed census classification of occupations to the categories of the ISCO. Excluding armed forces occupations, which are included in a separate major group of the ISCO scheme and not further differentiated, the ISCO first edition includes 198 separate lines, or "unit groups." Many countries had less detailed classifications than these and rather than omit a match altogether in such cases, the more highly aggregated lines of the individual country census were matched to each of the component ISCO lines. This resulted in each of the component ISCO lines being assigned the same value on the education or income variable, which amounts to assuming that the component occupational categories are identical with respect to their education or income distributions. This assumption is clearly false to at least some degree, as is clear from inspection of the distributions for those countries that do make fine distinctions. However, it seemed preferable to approximate the "true" education or income level for as many ISCO categories as possible by use of more highly aggregated averages than to forego matches altogether. The consequence of the procedure used here is that the true correlations between attributes of occupations both within and across countries will tend to be somewhat underestimated. Hence, the correlations reported here should be taken as minimum estimates of the correlations that would obtain if more precise matching had been possible. Of course, sometimes the individual country classifications were more detailed than the ISCO classification, and in this case the individual country lines were collapsed to match a single ISCO line. In this case, the same sort of error is not introduced, since the collapsing was done by taking a weighted average of the values of the component scores, with the weights representing the number of cases in each component category. The only difficulty entailed in collapsing individual country lines occurred when an ISCO line included

part of but not all of an individual country line. This, however, is a standard difficulty of any occupational matching procedure.

To permit computation of correlations between education and income measures on the one hand, and prestige scores on the other, still another adjustment of the data was required. Recall that the matching of titles used in prestige studies across countries was effected by adapting and expanding the revised edition of the ISCO scheme while the education and income measures were coded according to the original edition. As was indicated above, the original edition was used to code census data because many national census classifications were based upon it, while the revised edition was used to code titles used in prestige studies because it is considerably more extensive than the original edition and, moreover, is likely to form the basis for subsequent census tabulations and hence provided a superior framework for the Standard International Occupational Prestige Scale (discussed in detail in Chapter 8). Because of the use of different coding schemes for the two sets of data, the two sets had to be brought into correspondence to enable the computation of correlations between prestige and the other characteristics. To accomplish this I made use of the conversion table provided in the revised edition of the ISCO manual (International Labor Office, 1969a) to map the 509 occupation lines generated in the course of the prestige coding into the 198 original edition ISCO categories. A simple average of the prestige scores of all occupations falling into any ISCO category was then computed, generating a matrix of 198 occupational categories by 60 places. This matrix was then combined with the census data coded for all available countries and the appropriate correlations were computed.

Undoubtedly, the crude averaging procedure adopted here does some violence to the accuracy of the prestige scores assigned to given lines. However, the alternative, equally arbitrary, would have been to introduce some judgmentally based weighting procedure for the occupational titles entering into each average. Since there was no good basis for arriving at weights, that alternative was abandoned. Finally, it should be noted that while the revised ISCO categories were for the most part mapped into a single original ISCO line, some exceptions were made. In particular, the original edition of the ISCO made industrial distinctions within the managerial category which neither the revised ISCO nor my modification of it preserved. Hence, in this instance my titles were distributed over several original edition ISCO categories.

Intercorrelations of Occupational Characteristics. Recall that the first proposition of the theory of prestige determination outlined in Chapter 1 is that occupational positions are inherently differentiated and hierarchically ordered with respect to, among other attributes, the skill it takes to perform them. A corollary of this is that the skill hierarchy of occupations should be more or less invariant across societies. If each job has a characteristic skill level associated with it that is inherent in the nature of the job, then despite differences in the organization of work from place to place, the relative skill of incumbents of each position should be much the same across societies.

Then if, as argued above, educational attainment can be taken as an adequate indicator of skill differentials, the average level of educational attainment of incumbents of various occupations should be highly correlated across societies. Table 5.1 is a matrix of such intercorrelations for the 15 countries for which data are available. The size of these intercorrelations is striking: The average correlation across all pairs of countries is .76, almost as high as the average intercountry prestige correlation reported in Chapter 4. These results can be taken as providing strong support for the idea that occupations are more or less invariant across societies with respect to relative skill requirements.

Moreover, it is possible to argue that the average intercountry correlation is even higher, and that unreliable data for Taiwan and Zambia pulled it down. With the exception of these two countries, all the education data are from national census statistics, and hence can be considered as reliable as any other data available for such countries. For Taiwan and Zambia, however, data are from surveys of enterprises. The Taiwan data are restricted to workers in manufacturing and service industries, and even within these categories coverage is incomplete. The Zambian data are restricted to occupations with large proportions of incumbents having at least some secondary education. Thus, a large fraction of the labor force, concentrated particularly in low-prestige jobs, is excluded from the survey, attenuating the range of educational attainment and probably reducing the correlations with other countries from what they would otherwise be. Some evidence supporting the assumption that the Zambian correlations, at least, are too low is to be found in a comparison of data from Ghana. Ghana, similar to Zambia in level of development (as measured by such indicators as per capita GNP, school enrollments per population, percentage of the labor force in agriculture, etc.), exhibits correlations with the other countries included in Table 5.1 that are markedly higher than those for Zambia and not much different from the intercorrelations among the remaining countries. Hence, it is questionable whether the low correlations involving Zambia should be taken as evidence of a deviant educational hierarchy of occupations or simply as evidence of unreliability in the data. Excluding Taiwan and Zambia, the average of the remaining correlations increases to .81, identical to the mean intersocietal prestige correlation.

Let us turn now to the second determinant of prestige for which we have

TABLE 5.1
Intercorrelations of Education Levels of Occupations[a]

Country[b]	(1)	(2)	(8)	(17)	(18)	(20)	(23)	(28)	(31)	(34)	(39)	(50)	(57)	(59)	(60)
(1) United States	*166*	.90	.93	.86	.75	.85	.89	.92	.85	.85	.74	.78	.84	.66	.55
(2) Argentina	125	*144*	.94	.91	.77	.85	.88	.90	.87	.94	.75	.75	.74	.65	.66
(8) Canada	149	124	*164*	.89	.81	.87	.91	.93	.94	.91	.78	.80	.84	.68	.56
(17) Germany (West)	89	75	80	*93*	.78	.80	.88	.89	.78	.89	.76	.68	.78	.84	.69
(18) Ghana	161	133	157	90	*182*	.72	.82	.78	.75	.74	.69	.74	.75	.63	.43
(20) Great Britain	148	127	146	84	160	*170*	.81	.92	.81	.86	.66	.75	.80	.75	.61
(23) India	49	44	47	32	55	55	*61*	.88	.84	.84	.76	.74	.85	.75	.38
(28) Israel	112	101	115	89	125	120	50	*137*	.90	.86	.73	.84	.78	.82	.57
(31) Japan	129	117	125	68	137	134	49	99	*146*	.85	.79	.73	.81	.67	.54
(34) Netherlands	138	121	130	91	140	133	45	107	114	*150*	.74	.68	.73	.67	.57
(39) Norway	123	102	113	80	127	117	42	90	100	123	*134*	.71	.70	.54	.46
(50) Taiwan	44	38	44	35	52	49	25	41	40	39	36	*53*	.53	.59	.34
(57) USSR	110	101	112	67	124	122	51	95	110	106	95	41	*135*	.72	.46
(59) Yugoslavia	109	94	105	61	110	108	34	77	98	96	88	31	82	*117*	.64
(60) Zambia	166	144	164	93	182	170	61	137	146	150	134	53	135	117	*198*

[a] Number of occupations entering each correlation given in lower triangle; diagonal gives total number of occupations for each country. Country numbers correspond to their ordering among all 60 places, to facilitate comparisons across tables. See Table 4.1 for a convenient listing of countries.

[b] Sources: Data for (2), (17), (34), (39), and (59) from Horowitz et al., 1966; other sources are (1) U.S. Bureau of the Census, 1963: Table 9; (8) Canada Dominion Bureau of Statistics, 1963a: Table 17; (18) Ghana Census Office, 1964: Table 8; (20) Great Britain General Register Office, 1956: Table 46; (23) India Cabinet Secretariat, 1970: Table 7.1; (28) Israel Central Bureau of Statistics, n.d.; (31) Japan Bureau of Statistics, 1963: Table 9; (50) Taiwan Labor Force Survey Research Institute, 1968: Table 16; (57) USSR Tsentral'noye Statistichyeskoye Oopravlyeniye, 1962: Tables 47, 51; (60) Zambia Office of National Development and Planning, 1966: Table C-1.

data, occupational income. Since income is posited to depend upon a number of factors, some of which may vary from place to place, intersocietal similarities with respect to the relative income of various jobs would not be expected to be as great as in the case of educational levels. For example, capitalist and socialist countries might be expected to exhibit somewhat greater divergences with respect to occupational income levels than countries with similar economic systems.

Table 5.2 presents intercorrelations in occupational income levels for 11 countries. The average intercountry correlation is .65. This is strikingly high, although, as predicted, not as high as that for education. However, the notion that socialist countries are different from capitalist countries with respect to occupational income levels does not hold up, at least when Yugoslavia is taken as socialist and compared with the other 10 countries (obviously, this is less than a perfect comparison, since many of the remaining countries have partially socialized economies). The average of the correlations with Yugoslavia is actually higher (.69) than the average across all countries. Costa Rica and Taiwan, by contrast, appear to have somewhat deviant income distributions. However, whether this reflects actual idiosyncracies in their income structures or inadequacies in the data is not clear. Hence, not too much should be made of those differences; rather, attention should be focused on the high average intercorrelation.

Apart from the census materials just reported, one additional body of data on occupational income distributions permitting cross-national comparsons exists—monthly wage rates for 41 industrial occupations, collected from enterprise censuses for 27 of the countries in our sample (International Labor Office, 1958b). The advantage of these data is that they are available for a far larger number of countries than are census data on occupational income distributions. However, they have two disadvantages: They are based on a much more restricted set of occupations than the census data, heavily concentrated in the skilled blue-collar range; and because they are based on enterprise surveys they do not take account of other sources of income, which are to some extent correlated with and derive from occupational position. Both of these factors can be expected to reduce the correlations across countries by attenuating the variance of the income distributions. Nonetheless, for the 306 pairs of countries with information for at least 10 occupations in common, the average intercountry correlation is .51, indicating a substantial degree of similarity in the relative wage rates of industrial occupations.

Relation of Prestige to other Occupational Characteristics. The next task is to examine directly the relationship between the prestige of occupations and their other characteristics. In light of the theory proposed above,

TABLE 5.2
Intercorrelations of Income Levels of Occupations[a]

Country[b]	(1)	(8)	(9)	(12)	(23)	(36)	(40)	(47)	(48)	(50)	(59)
(1) United States	*166*	.87	.68	.51	.81	.67	.64	.68	.82	.44	.72
(8) Canada	151	*166*	.65	.45	.76	.69	.72	.65	.77	.53	.75
(9) Ceylon	130	132	*151*	.53	.77	.65	.69	.73	.65	.55	.69
(12) Costa Rica	166	166	151	*198*	.50	.50	.41	.45	.53	.42	.65
(23) India	49	48	46	60	*60*	.72	.87	.84	.81	.57	.72
(36) New Zealand	166	166	151	198	60	*198*	.73	.65	.77	.56	.68
(40) Pakistan	74	74	67	86	43	86	*86*	.75	.74	.67	.57
(47) Surinam	98	99	91	117	42	117	65	*117*	.66	.53	.58
(48) Sweden	151	146	136	173	55	173	78	104	*173*	.45	.78
(50) Taiwan	87	87	80	102	38	102	61	71	91	*102*	.72
(59) Yugoslavia	105	108	96	117	38	117	53	64	103	57	*117*

[a]Number of occupations entering each correlation given in lower triangle; diagonal gives total number of occupations for each country.

[b]Sources: (1) U. S. Bureau of the Census, 1963: Table 25; (8) Canada Dominion Bureau of Statistics, 1963a: Table 21; (9) Ceylon Department of Census and Statistics, 1962: Table 1; (12) Costa Rica Direccion General de Estadistica y Censos, 1966: Table 39; (23) India Cabinet Secretariat, 1970: Table 8.1; (36) New Zealand Department of Statistics, 1964: Table 5; (40) Hashmi *et al.*, 1964: Table 4.03; (47) Surinam Algemeen Bureau voor de Statistiek, 1962: 58-78; (48) Sweden Statistiska Centralbyrån, 1965: Table 26; (50) Taiwan Labor Force Survey Research Institute, 1968: Table 27, and Taiwan Provincial Government, 1969: Table 20; (59) Yugoslavia Savezni Zavod za Statistiku, 1965: Table 121.13.

education and income levels of occupations should be highly correlated with their prestige. Of course, as before, the correlations cannot be expected to be perfect, since other determinants of prestige, in particular amount of authority and economic power, are unmeasured. Nonetheless, if the theory is correct, correlations between prestige and, respectively, education and income should be uniformly high across societies.

The pertinent correlations are given in Table 5.3. First, we observe that both the education and the income correlations are strikingly high. The mean correlation of education with prestige is .72, and only three correlations fall below .6, those for peasant India, the USSR, and Zambia. The mean correlation of income with prestige is .69, and only two correlations fall below .6, those for Costa Rica and peasant India. Since we have already noted the anomalous nature of the prestige data from peasant India, and since the Indian income and education data refer to the nonagricultural population, the low correlations for India are hardly surprising. Similarly, the inadequate character of the education data for Zambia has been noted above. This leaves us with two true anomalies, the Soviet correlation between the percentage of middle school graduates and the prestige of occupations, and the Costa Rican correlation between mean income and prestige. Clearly, these deviations from the expected pattern require further study.

However, it is of interest to note that it is the prestige hierarchy and not the educational hierarchy of the USSR that deviates from the standard pattern. The relative educational attainments of incumbents of various occupations in the USSR are highly correlated with those in other countries (Table 5.1) as well as with the generic worldwide occupational prestige hierarchy represented by the Standard Scale, but are much more modestly correlated with the Soviet occupational prestige hierarchy. This informs us where to look in trying to understand the idiosyncratic features of the occupational structure of the Soviet Union, a topic we will return to in Chapter 7.

The final task in this section is to consider the joint effect of education and income on prestige. Data for both education and income levels are available for only five countries—the United States, Canada, India, Taiwan, and Yugoslavia, and for the latter three countries the data are deficient in various ways discussed earlier. Nonetheless, we can use them to make a tentative assessment of the determinants of occupational prestige hierarchies. Table 5.4 presents the results of the regression of prestige on income and education for each of these places; India is represented by two equations because we have two sets of prestige data for India. Two observations can be made about these results. First, with the exception of peasant India and Taiwan, for which the data are clearly poor, in each case at least two-thirds of the variance in the prestige of occupations can be attributed to

TABLE 5.3
Intercorrelations of Occupational Education, Income, and Prestige, and Correlations with the Standard International Occupational Prestige Scale[a,b]

Country	Correlations within Countries: Education-Income r	N	Education-Prestige r	N	Income-Prestige r	N	Correlations with Standard Scale: Education r	N	Income r	N
(1) United States	.73	166	.85	135	.79	135	.83	166	.78	166
(2) Argentina	--	--	.60	19	--	--	.82	144	--	--
(8) Canada	.73	164	.87	94	.78	96	.84	164	.83	166
(9) Ceylon	--	--	--	--	.77	18	--	--	.70	151
(12) Costa Rica	--	--	--	--	.46	58	--	--	.53	198
(17) Germany (West)	--	--	.67	36	--	--	.86	93	--	--
(18) Ghana	--	--	.84	21	--	--	.79	182	--	--
(20) Great Britain	--	--	.82	34	--	--	.82	170	--	--
(23) India (Peasant)	.84	59	.48	14	.35	13	.83	61	.70	60
(24) India (Student)			.76	13	.81	13				
(28) Israel	--	--	.94	31	--	--	.87	137	--	--
(31) Japan	--	--	.81	46	--	--	.82	146	--	--
(34) Netherlands	--	--	.84	85	--	--	.82	150	--	--
(36) New Zealand	--	--	--	--	.73	67	--	--	.69	198
(39) Norway	--	--	.78	38	--	--	.75	134	--	--
(40) Pakistan	--	--	--	--	.77	30	--	--	.67	86
(47) Surinam	--	--	--	--	.61	54	--	--	.60	117
(48) Sweden	--	--	--	--	.74	23	--	--	.77	173
(50) Taiwan	.71	53	.72	13	.70	19	.66	53	.62	102
(57) USSR	--	--	.47	46	--	--	.79	135	--	--
(59) Yugoslavia	.85	87	.83	32	.80	34	.76	117	.86	117
(60) Zambia	--	--	.17	29	--	--	.55	198	--	--
Mean	.77		.72		.69		.79		.70	

[a] Sources: See footnotes to Tables 5.1 and 5.2.
[b] See Chapter 8 for a description of the Scale.

TABLE 5.4
Results of Regression of Prestige on Education and Income

Country	Net Regression Coefficients in Standard Form: Education	Income	Coefficient of Determination (R^2)
(1) United States	.58	.37	.78
(8) Canada	.63	.32	.80
(23) India (Peasant)	.63	.18	.37
(24) India (Student)	.27	.58	.68
(50) Taiwan	.45	.38	.59
(59) Yugoslavia	.56	.32	.73
Mean	.52	.36	.66

variance in occupational education and income levels (the remaining variance presumably is due in large part to aspects of power and privilege that we are unable to measure). Second, with the exception of Indian university students, the influence of education is substantially stronger than the influence of income, which is not surprising considering that educational requirements are an intrinsic feature of occupations while income differences are influenced by a host of exogenous as well as intrinsic factors. Together, these results provide substantial support for the notion that there is a uniform occupational structure throughout the world.

The similarity between the occupational structure of Yugoslavia and those of the United States and Canada is particularly striking, not only because Yugoslavia, in contrast to the United States and Canada, is a newly industrializing socialist country with strong aspects of central planning, but also because the criterion variable for Yugoslavia is not prestige but "desirability." Recall that for this reason Yugoslavia was excluded from the bulk of the analysis and only reintroduced here because of the paucity of other data. The similarity between the equations for the United States, Canada, and Yugoslavia is added testimony to the robustness of the relationship between education, income, and prestige.

To sum up, the results of this and the previous section clearly favor a structural model of occupational prestige determination. Wherever we have data we find basic intersocietal similarity in the relative education required to perform various occupations and in the relative income returned to them. Second, for the most part the connections between educational requirements, income gained, and prestige are similar throughout the world. Thus, it cannot be the case that occupational prestige hierarchies are similar merely as a consequence of the imposition of a Western value system on the non-Western world. Rather, it is evident that to a large degree occupational

prestige hierarchies are similar throughout the world because occupational skill and hence income hierarchies are similar throughout the world and these features of occupations determine their prestige.

OCCUPATIONAL STRUCTURES IN PAST SOCIETIES

Having shown that occupational structures are essentially similar throughout the contemporary world, we now ask whether this is the consequence of the homogenizing effect of industrialization or whether occupational structures are similar in all complex societies, industrialized or not. To decide between these alternatives we examine data from past societies. Since industrialization is, at best, about 150 years old (the rapid expansion of industry known as the "industrial revolution" first occurred in Great Britain during the period 1750–1825, in the United States and Western Europe during the nineteenth century, and elsewhere still later, if at all: Hughes, 1968), demonstration of substantial similarity in occupational structures between pre-nineteenth-century societies and the present will constitute strong evidence for a pure structural theory of occupational prestige.

As usual, appropriate data are extremely sparse. Not only are there no data on authority or economic power, but there are no data for past societies on skill levels of occupations. I have, however, located systematic data on the wealth or income of occupational incumbents for six past societies and "prestige" data for two past societies. Let us consider the prestige data first.

In 1395 a rank ordering of castes was promulgated by Raja Jayastihi Malla of Nepal (Wright, 1958:111–112). Since this was the official ordering of castes and since fourteenth-century Nepali occupations were almost exclusively organized on the basis of caste membership (in fact, at the time castes were named by the occupations of their members), it seems reasonable to interpret such a caste ranking as an occupational prestige ranking. Similar data are available for fifteenth-century Florence, in the form of a ranking of guilds. An official rank order of guilds was maintained by the Florentine Commune, and a history of the guilds of Florence interpolates various subguilds and individual occupations into the official list (Staley, 1906:61–62). The rank order of guilds as of 1427 was used here to correspond to wealth data described below.

The wealth data consist of estimates, of varying quality, of either the average wealth held by incumbents of various occupations or the average income returned to particular occupations. Data are available for fifteenth-century Florence, late-seventeenth-century England, late-eighteenth-century America, mid-nineteenth-century Philadelphia, mid-nineteenth-century Hamilton, Ontario, and late-nineteenth-century London.[3]

In order to assess the stability over time in the ordering of occupations with respect to income or wealth and prestige, it was necessary to match occupational titles from each of the historical data sets to the standard categories described in Chapter 2. Since these categories were developed inductively from mid-twentieth-century data the ease with which the matches could be made itself constitutes a partial test of the claim (see Chapter 1) that despite the proliferation of new jobs as a result of changes in technology, and despite the massive and ubiquitous shift in the distribution of labor forces associated with industrialization (out of agricultural and laboring jobs and into nonmanual jobs), the organization of functions into specific occupations has remained strikingly stable. Most of the differences between occupational structures, I claim, represent greater or lesser subdivision of functions into separately named occupational titles; they do not represent differences in the actual distribution of functions among occupational categories.

Furthermore, differences in the degree of differentiation of occupations tend to reflect the relative importance of specific functions in particular economies. Thus, in fifteenth-century Florence, fine distinctions were made between various kinds of wool workers; and in medieval Nepal several varieties of priests were distinguished. But since highly specialized subcategories of occupations tend to be relatively homogeneous with respect to their economic or prestige status, little precision is lost by aggregating such categories for comparative purposes.

The best evidence for the stability of occupational categories over time is the very fact that it was possible to carry out the task described here. In very few instances did it prove difficult or impossible to find a match between the historical data and contemporary titles. (And, for the most part, those difficulties that did arise resulted from vaguely defined titles, e.g., "agent," which are as common to contemporary data as to the historical material analyzed here.) Nearly all the lists of occupations include high government officials, clergy, lawyers, physicians, teachers, large merchants, shopkeepers, artisans of various sorts—smiths, masons, carpen-

[3] The data for Florence are from Professor David Herlihy's collation: "Census and Property Survey (*Catasto*) of Selected Italian Cities, 1427." They were made available, with Professor Herlihy's permission, by the Data and Program Library Service of the University of Wisconsin. The data for seventeenth-century England are Gregory King's estimates, first published in 1696. The version used here is that in Forster (1969:239–240). The data for eighteenth-century America were compiled by me from the narrative material presented in Main (1965: Chapter 3). The data for Philadelphia are from Blumin (1969: Table 1); those for Hamilton are from Katz (1971: Table II.42); and those for London are from Booth (1889, 1895).

ters, and so on—and unskilled laborers. Although specific occupational titles are present in some of the data sets and not in others, the extent to which the basic categories remain the same is striking. Even in medieval Nepal, by far the most nearly unique society under consideration here, the occupational categories are generally quite recognizable and are surprisingly comparable to occupations in the modern world. The matches between the Nepali and Florentine prestige data and the Standard Scale (Appendix A) are shown in Tables 5.5 and 5.6; space limitations preclude displaying the wealth data but they are available from me upon request. These materials are also more fully described in Treiman (1976).

Let us now consider how stable occupational status hierarchies have been over time. Table 5.7 presents intercorrelations of wealth and prestige levels among the eight historical data sets, as well as correlations with the generic prestige hierarchy of the contemporary world (Standard Scale). The size of these correlations is striking. For each historical period, going back to fifteenth-century Florence, the relative levels of occupational wealth or income are strongly related to the contemporary worldwide average occupational prestige hierarchy. In fact, the historical correlations are approximately as strong as the contemporary ones. For past societies the average correlation of occupational wealth (or income) levels with the Standard Scale is .75, whereas the corresponding average correlation for contemporary societies is only .70.[a] Similarly, the average intercorrelation of occupational wealth levels over the four and one-half centuries between 1427 and 1890 is .75, suggesting that the intertemporal stability of occupational structures within Europe is possibly greater than the intersocietal similarity within the contemporary world. Lending support to this view is the striking demonstration by Brown and Hopkins (1955) of stability in the relative wages of building craftsmen and laborers in England for more than 5 centuries:

> after [about 1410] there was no sustained change until the First World War. In the fifteenth century the craftsman got half as much again as the labourer, 6d. a day to his 4d.; in the 1890's he got half as much again, 7½d. an hour to his 5d.; he got half as much again, or within a halfpenny of it, in every settled period in between [Brown and Hopkins, 1955:202].

Finally, in our own data there is no evidence whatsoever that the industrial

[a] It may seem anomalous that the average correlation for the historical data is actually slightly higher than that for the contemporary data, but the difference is not large enough to be meaningful. Moreover, the historical average is obviously slightly inflated by the correlation between the 1688 British data and the Standard Scale, which is excessively high due to a correlation of extremes. Omitting this correlation, the average correlation for the historical data drops to .72.

TABLE 5.5
Matches of Caste Titles for Nepal (ca.1395) to Standard Scale, together with Rank Order of Nepali Castes Listed in Decreasing Order

Rank	Nepali Caste Title	Standard Scale Code	Standard Scale Title	Standard Scale Score
63	*Bhupa, raja, narendra or chhetri* (ruler or warrior)	10000	High Armed Forces Officer	73
62[a]	*Lekhaka* (scribe) (62)	02033	High Civil Servant, Dept. Head	71
	Kayastha (scribe) (61)			
59[a]	*Mantrin* (state official, minister) (60)	03100	Middle Rank Civil Servant	66
	Saciva (state official, minister) (59)			
	Amatya (state official, minister) (58)			
59[a]	*Dwija, bipra or brahmana* (priest) (64)	01410	Clergyman	60
	Pujita (temple priest) (57)			
	Acarya (Hindu priest) (55)			
56	*Deva cinta* (God thinker)	01490	Religious Teacher	56
53[a]	*Grahacintaka* (astrologer) (54)	01991	Diviner	37
	Jyotisa (astrologer) (53)			
	Ganika (astrologer) (52)			
51	*Daivajna* (lower caste priest?)[b]	--	--	--
50	*Alama* (?)	--	--	--
49	*Srichanta* (?)	--	--	--
48	*Sajakara* (tailor)	07910	Tailor	40
47	*Supika* (soup cook?)	--	--	--
46	*Cichaka* (?)	--	--	--
45	*Marikara* (confectioner)	07760	Baker	33
44	*Silpikara* (craftsman)	09950	Skilled Worker	42
43	*Bharika* (bearer)	09712	Porter	17
42	*Napika* (barber)	05700	Barber	30
41	*Lepika* (plasterer	09550	Plasterer	31
40	*Daukara* (wood carver)	0819[c]	Cabinetmakers and related woodworkers, nec	31
39	*Taksaka* (carpenter, house measurer)	09540	Carpenter	37

TABLE 5.5 *(Continued)*

Rank	Nepali Caste Title	Standard Scale Code	Standard Scale Title	Standard Scale Score
38	*Srinkhari* (?)	--	--	--
37	*Ksetrakara* (surveyor, gov't land measurer)	00310	Surveyor	58
36	*Kumbhakara* (potter)	08920	Potter	25
35	*Tuladhara* weigher--trading)	04520	Market trader	36
34	*Karnika* (weaver)	07540	Weaver	30
33	*Kansyakara* (bell maker)	07240	Metal Caster	33
32	*Suvarnakara* (goldsmith)	08800	Jeweler, Goldsmith	43
31	*Tamrakara* (copper smith)	08731	Copper, Tin Smith	32
30	*Gopaka* (cowherd)	06240	Livestock Worker	26
29	*Bhayala - chanchu* (?)	--	--	--
28	*Kanjikara* (?)	--	--	--
27	*Tayoruta* (?)	--	--	--
26	*Tankadhari* (?)	--	--	--
25	*Vimari* (?)	--	--	--
24[a]	{*Surppakara* (winnower) (24) *Natebaruda* (winnower) (23)}	0629[c]	Agricultural and Animal Husbandry Workers nec	14
22	*Bathahom* (?)	--	--	--
21	*Gayane* (bard singer)	01712	Musical Entertainer	32
20	*Citrakara* (painter)	09310	Building Painter	31
19	*Surabija* (?)	--	--	--
18	*Natijiva* (actor who lives by prostituting his wife)	0599[c]	Other Service Workers	29
17	*Nandhurda* (oil presser)	0779[c]	Food and Beverage Processors nec	34
16	*Vyanjanakara* (cook)	05310	Cook	31
15	*Mali* (gardener)	06270	Gardener	21
14	*Mansabikri* (butcher)	07730	Butcher	31
13	*Kirata* (hunter)	06491	Hunter	6
12	*Badi (?)*	--	--	--
11	*Dhanyamari (?)*	--	--	--
10	*Tandukara* (weaver?)	--	--	--
9	*Nadichedi* (umbilical cord cutter? vein cutter?)	--	--	--
8	*Kundakara* (ivory carver)	09491	Ivory Carver	33
7	*Lohakara* (blacksmith)	08310	Blacksmith	34
6	*Ksatrikara* (?)	--	--	--
5	*Dhobi* (washerman)	05600	Launderer	22
4	*Ravaka* (dyer)	07560	Cloth Dyer	25
3	*Niyogi* (?)	--	--	--
2	*Matangi* (elephant driver)	09860	Animal Driver	18
1	*Charmakara* (leather worker)	08030	Leather Worker	22

Source: Wright (1958:111-112). Professor Theodore Riccardi, Jr., Department of Middle East Cultures and Languages, Columbia University, was consulted regarding translations.

[a]Average of component scores (individual scores are given at the end of each component Nepali title).

[b]Titles with doubtful or unknown translations were not matched to Standard Scale. These are indicated by a "?" following the title.

[c]Matched to a "unit group" category in the Standard Scale rather than to an "occupation" category; hence excluded from the correlations reported in the Table 5.7. See Appendix A.

TABLE 5.6

Matches of Occupational and Guild Titles for fifteenth-Century Florence to Standard Scale, together with Fifteenth-Century Florentine Protocol Rank Listed in Decreasing Order

Rank	Florentine Title	Standard Scale Code	Standard Scale Title	Standard Scale Score
34	Knights[a]	10000	High Armed Forces Officer	73
32	Judges	01220	Judge	78
32[c]	Doctors of law (university degree holders)[a] (33); Notaries (30)	01210	Lawyer, Trial Lawyer	71
27	Bankers and money changers	02114	Bankers	67
27[c]	Doctors of medicine (university degree holders)[a] (31); Physicians - surgeons (23)	00610	Physician	78
25	Goldsmiths[b]	08800	Jeweler, Goldsmith	43
23[c]	Master merchants (guild of Calimala or merchants in foreign cloth) wholesale (29); Wool manufacturers and merchants - wholesale (28); Master silk manufacturers and merchants - wholesale (26); Linen manufacturers and merchants - wholesale and retail (10)	04106	Wholesale Distributor	58
22[c]	Wool manufacturers. See above (28); Master silk manufacturers. See above (26); Silk makers and merchants - retail (10); Linen manufacturers. See above (10)	02112	Head of Firm	63
22	Apothecaries	00670	Pharmacist	64
21	Agents and brokers	04104	Broker	55
20	Painters (miniatures)[b]	01610	Artist	57
19	Stationers, perfumers, mercers and veil makers[b]	_[d]	--	-
18	Furriers and skinners - wholesale	07920	Fur Coat Tailor	35
17	Silk makers and merchants - retail (24); Linen manufacturers and merchants - wholesale and retail (10)	04101	Large Shop Owner	58
17	Butchers - wholesale livestock dealers	07732; 04105	Master Butcher (45); Livestock Broker (40)	42[c]
16	Butchers - retail	07730	Butcher	31
15	Blacksmiths	08310	Blacksmith	34
14	Shoemakers	08010	Shoemaker, Repairer	28
13	Master Builders, stonemasons, and wood workers	09510; 09594	Mason (34); Skilled Construction Worker (46)	40[c]
11	Tailors	07910	Tailor	40
9	Wine makers and merchants (9); Retail cloth dealers and retail traders (including small industries) (12); Oil merchants - general provision dealers (grocers) (6)	04100	Shop Keeper	42
8	Innkeepers	05102; 05104	Hotel Operator (46); Pub Keeper (33)	40
7	Tanners	0761[e]	Tanners and Fellmongers	22
5	Saddlers	08030	Leather Worker	22
4	Locksmiths, precision metal workers	08390	Locksmith	40
3	Armourers	08730	Sheet Metal Worker	36
2	Carpenters	09540	Carpenter	37
1	Millers and bakers	07710; 07760	Grain Miller (33); Baker (33)	33[c]

Source: Staley (1906:61-62).

[a]Not a guild; occupational category placed in protocol ordering by Staley.

[b]Guild that is a subsidiary of one of the 21 official guilds.

[c]Average of component scores (individual scores are given at the end of each component title).

[d]No matching occupation in Standard Scale.

[e]Matched to a "unit group" category in the Standard Scale rather than to an "occupation" category; hence, excluded from computation of correlations reported in Table 5.7. See Appendix A.

TABLE 5.7
Intercorrelations of Occupational Wealth and Prestige Levels for Past Societies, and Correlations with Standard International Occupational Prestige Scale[a]

Past Societies	Standard Scale	Nepal Prestige	Florence Prestige	Florence Wealth	England Income	U.S. Income	Philadelphia Wealth	Hamilton Wealth	London Income
Standard Scale	102	.73	.82	.69	.91	.74	.73	.75	.69
Nepal, 1395, caste rank	73	33	--	-.13	--	--	--	.35	.60
Florence, ca.1427, guild rank	90	8	10	.45	--	.70	.75	.60	.78
Florence, 1427, total wealth (log)	55	16	24	55	--	.84	.87	.80	.44
England, 1688, income (log)	15	3	4	5	15	.90	--	--	--
U.S., ca.1776, income (log)	43	8	12	19	12	43	.68	.88	.83
Philadelphia, 1860, wealth (log)	44	7	14	21	4	17	44	.75	.66
Hamilton, Ontario, 1860, wealth	49	11	18	25	7	20	25	49	.60
London, ca.1890, income (log)	169	21	16	35	7	25	29	33	162

Sources: See pp. 116-117 for details on sources.

[a]Number of occupations for which data available given in diagonal and number of matching occupations upon which correlation based shown below diagonal; correlations based on fewer than 10 cases not shown.

revolution had any impact on the relative privilege of occupational groups or on the relation between privilege and prestige. The correlations of occupational wealth levels with the Standard Scale prestige scores are equally high for the three preindustrial societies as for the three nineteenth-century cities. If industrialization had an impact, surely it would be manifest in the occupational structure of London. But there is no evidence for that in these data.

The "prestige" data for Florence and Nepal are equally striking. As would be expected, the correlation with the Standard Scale is substantially higher for Florence than for Nepal. (Nepal, in fact, resembles the least industrialized contemporary societies in the extent of deviation from the standard occupational prestige hierarchy—see Table 8.3). Since Florence was a major mercantile center, it is not surprising that its occupational prestige hierarchy is closer than Nepal's to the generic hierarchy of the modern world. It must be noted, however, that the Florentine hierarchy is still more idiosyncratic than are most contemporary societies regardless of their levels of industrialization. Nonetheless, as was true of the wealth hierarchy, the most striking point about the prestige hierarchy is that it is relatively stable over time.

On the basis of the theory of prestige developed in Chapter 1, there is every reason to believe that were data available for skill hierarchies they would be even more stable over time than income or wealth hierarchies, just as is generally true in the contemporary world. This, then, provides the basis for an additional test of the theory at such time as suitable data become available for past societies.[4] If occupational skill hierarchies for past societies can be shown to be as uniform as occupational wealth and prestige hierarchies, and, further, if the connections between skill, wealth, and prestige can be shown to be as strong for past societies as for present ones, a pure structural theory of prestige could be said to be firmly verified. However, for the present we must content ourselves with a somewhat more limited confirmation of the theory on the basis of fragmentary data. In addition to the evidence presented above, there are various impressionistic accounts of the class structure of past societies.

For example, Gideon Sjoberg's analysis of preindustrial cities includes an explicit discussion of the characteristic features of the social class systems of such societies. On the basis of data from feudal realms in traditional China, Japan, India, the Middle East, Europe, and Mesoamerica he asserts

[4] I would be extremely interested to be informed of any data of this sort. In particular, I am interested in locating cross-tabulations of occupation by literacy, the amount of schooling received, or skill levels, for any past society, or, for that matter, for any society not already included here.

(1960:108–109):

> Preindustrial cities across cultures display strong consistency in their class structure—in the kinds of criteria that are highly valued and the manner in which these are assigned in determining class position. Thus specific kinds of occupations are rated highly, and these are closely associated with certain kinds of achievements, greater power and authority, the "desirable" possessions, a particular kind of kinship position, and special moral and personal attributes. So too, the kinds of criteria that are devalued are very similar for cities from one culture to the next.

Sjoberg then goes on to identify the occupational groups that comprise the two major classes he sees as characteristic of preindustrial cities: a small upper class and a large lower class. He also recognizes status distinctions within each of these classes. Although his discussion is in narrative form and does not easily lend itself to a definitive rank ordering of occupational groups, I have attempted to translate Sjoberg's description (1960:118–123) into an occupational hierarchy for the purpose of comparing it to the standard prestige hierarchy of the contemporary world. Table 5.8 shows the occupational groups mentioned by Sjoberg, listed in the order implied by his narrative account. Occupational categories treated by Sjoberg as having similar status are grouped together within brackets. The only real ambiguity in Sjoberg's account is with respect to the highest lower-class group—he may not have considered low-level government, religious, and military personnel to have higher status than other lower-class categories. The right-hand column represents my matches of contemporary occupational titles (Standard Scale categories) to Sjoberg's categories.

Two features of this match are striking. First, there was no difficulty in effecting the matches, with the exception of large merchants. The category "general managers" is probably a poor match, both because it includes personnel who are not merchants and because it is not restricted to those involved in large enterprises. Nonetheless, it includes bankers, heads of large firms, and other titles comparable to the merchant princes Sjoberg intended to include as having equivocal upper-class status. The difficulty in effecting a match probably reflects an inadequacy of the Standard Scale more than a true lack of comparable occupational groups in preindustrial and contemporary industrial societies. Thus, once again, we have confirmation of the similarity of the occupational structure in all complex societies, industrial or preindustrial.

Second, the status hierarchies are remarkably similar. High-status occupational groups in preindustrial societies have the greatest prestige in contemporary societies, and the lowest status groups in preindustrial societies have the lowest prestige in contemporary societies. Thus, insofar as Sjoberg's assertion of uniformity in the class structures of preindustrial

TABLE 5.8
The Occupational Hierarchy of Preindustrial Cities

The Preindustrial Occupational Hierarchy[a]	Matches to Standard Scale Categories[b]	Standard Scale Score
Upper class		
High political officials	Legislative Officials and Government Administrators - 020	64
High religious officials	High Church Official - 01411 (83) Clergyman - 01410 (60)	72
High educational officials	University and Higher Education Teachers - 0131	78
Landlords	Agricultural Landowner - 13003	65
Military leaders	High Armed Forces Officer - 10000 (73) Armed Forces Officer - 10001 (63)	68
Equivocal status		
Large merchants	General Managers - 0211	65
Lower class		
Lower government personnel	Government Executive Officials - 0310	55
Lower religious personnel	Other Religious Workers - 014 except 01410, 01411	46
Lower military personnel	Noncommissioned Officer - 10002 (44) Soldier - 10003 (39)	42
Prosperous merchants	Large Shop Owner - 04101	58
Master artisans	Independent Artisan - 09951	50
Small shopkeepers	Shopkeeper - 04100	42
Ordinary skilled workers	Skilled Worker - 09950	42
Unskilled laborers	Laborers - 0999	18
Peasants	Agricultural and Animal Husbandry Workers - 062	22

[a] Compiled from Sjoberg (1960:118-123). See text for details. Titles within brackets in left-hand columns have similar status.

[b] Matching title is followed by code number--see Appendix A. Where more than one Standard Scale title is matched to a preindustrial category, the scores are averaged; individual scores are given in parentheses.

cities is credible, we can infer from it a uniformity of occupational hierarchies throughout the urban world, past or present.

CONCLUSIONS

The concern of this chapter has been to evalute competing explanations for the worldwide similarity in occupational prestige hierarchies. Of the four theories of prestige determination outlined in Chapter 1, the first, a *pure cultural* theory that argues that prestige reflects specific cultural norms and values and hence will differ substantially from society to society, was rejected on the basis of the demonstration in the previous chapter of strong cross-cultural uniformity in prestige evaluations. The second, a *cultural diffusion* theory that argues that a Western pattern of occupational evaluation diffused throughout the world without a corresponding diffusion of a Western division of labor and organization of work roles, was rejected on the basis of a demonstration that not only prestige but other attributes of occupations—in particular, their relative educational requirements and income returns—are essentially invariant across contemporary societies. The third, a *structural diffusion* theory that argues that what was adopted from the West was not simply a pattern of occupational evaluation but a characteristic division of labor associated with industrialism, was rejected on the basis of a demonstration that occupational hierarchies of income and prestige are invariant over time as well as space, so that the same hierarchy characterizes preindustrial as well as industrial societies.

Having rejected these alternatives, we can conclude that the data favor the pure structural theory proposed in Chapter 1: In all complex societies, industrialized or not, a characteristic division of labor arises that creates intrinsic differences among occupational roles with respect to power; these in turn promote differences in privilege; and power and privilege create prestige. Since the same process operates in all complex societies, the resulting prestige hierarchy is relatively invariant in all such societies, past or present.

But this process does not create an *absolutely* invariant pattern of occupational evaluation. Within the constraints of the generic process it is possible that there are both systematic and idiosyncratic societal variations, and it is to a search for these that we now turn.

6

Prestige and Industrialization

In the previous chapter I attempted to account for the fundamental similarity of occupational prestige hierarchies around the world. In this and the following chapter I consider the converse question: How can we account for such intercountry differences in occupational evaluation as can be observed? To try to answer this question, two sorts of analysis are undertaken. First, in the present chapter the relationship between prestige and industrialization is examined, in an attempt to show that similarities with respect to level of industrialization give rise to similarities in occupational prestige evaluations. In Chapter 7, intercountry variations in the prestige of particular occupations are studied to see whether, and to what extent, patterns of prestige evaluation are affected by the idiosyncratic structural and cultural features of individual societies.

PRESTIGE SIMILARITY AND SOCIAL STRUCTURE

It must be remembered that in considering differences between countries in the evaluation of occupations we are operating within the context of very high general agreement in the basic pattern of occupational evaluation. The question is not what accounts for similarity or lack of similarity between countries in their prestige evaluations, but what accounts for differences in the *degree* of agreement? What determines the precise way in which occupations are hierarchically evaluated in particular countries? And what accounts for pairs of countries agreeing almost perfectly in the prestige they accord various occupations or being only in crude general agreement?

In the previous chapter it was shown that the prestige of occupations derives largely from the skill and training required to perform them and the income gained from doing them. Thus, as the socioeconomic characteristics