

the direct descendants of the East India Company branch offices. In the African trade, once the trade routes were established and the goods for the trade were defined, the joint-stock companies were superceded by independent private traders, and the monopoly rights of the African companies were extinguished.

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**JOURNEYMEN.** The first references to the journeyman (French *compagnon*, German *Gesell*, Italian *lavorante*) as a skilled laborer employed by a master craftsman by the day (Fr. *journée*) appear in European towns in the late thirteenth and early fourteenth centuries, as a by-product of the rapid increase in craft specialization during the period preceding the Black Death (1348-1350). Despite their importance to the everyday functioning of craft-based economies, however, journeymen are barely mentioned in craft legislation and emerge from the shadows chiefly at times of conflict with craft masters. Although

journeymen were not restricted to legally incorporated crafts, most action occurred within craft guilds because corporate status gave journeymen a legal basis for defending their interests.

By the fourteenth century, most journeymen would have concluded a formal apprenticeship that gave them the right to become full-time masters. In practice, however, most journeymen remained so all their lives, but not because of restrictions of access to corporations and the mastership (via entry fees and exams), as most premodern crafts were quite open to outside recruitment. Rather, craft occupations requiring major capital investments offered journeymen little prospect of becoming independent masters except on the periphery of the trade, living off subcontracting work under poorly paid and inflexible conditions. The later-medieval development of a segmented labor market, divided between a core of sedentary, married men, who were taught the innermost secrets of the trade, and a periphery of young, unmarried, mobile journeymen, who moved between shops, towns, and even occupations, placed additional restrictions on their social and economic mobility.

Although some journeymen associations began as religious confraternities, and others overcame restrictions on formal organization by posing as mutual aid societies, mutual financial aid was seldom their main function, as reflected by the fact that most countries outlawed worker associations as "confederacies and conspiracies" (see the 1563 English Statute of Artificers) against craft masters. Acting through strikes, the withdrawal of labor, and sometimes violence, journeymen based their claims upon their "property of skill," defined as a capacity to coordinate complex activities in the workplace that allowed them to emphasize the collective and cooperative nature of their work. The main sources of friction with masters were attempts to reduce piece rates, by not keeping them in step with living costs or in response to falling demand; the use of cheap apprentice labor; and the introduction of technology that reduced employment or devalued the journeymen's human capital. Concerns about deskilling and about the use of cheaper, less skilled labor often were shared by the poorer small masters, an overlap in interests that gave rise to alliances between the small masters and the journeymen against the larger, wealthier craftsmen. Whereas the journeymen's desire to control access to the labor market became a formal issue mainly during trade downturns, at other times more informal closed-shop arrangements might apply, based on the masters' need to hold on to a core of skilled labor through cyclical downturns.

Although collective action by journeymen was endemic to premodern crafts, historians' propensity to view journeymen associations as precursors of modern trade unions should be resisted; for rather than bargaining and class

struggle, their most salient function seems to have been to organize and coordinate journeyman tramping. Itinerant journeymen moving from towns to town in search of work became a common feature in the period of labor scarcity that followed the Black Death, and the practice continued to expand in several European countries when populations recovered. During the sixteenth century, journeyman tramping became partially institutionalized, most notably in German-speaking lands, where it was known as *Gesellenwanderung* or *Wanderzwang*, and to a lesser extent in France, where the eighteenth-century *compagnonnages* created a considerable political stir despite not being numerically very significant. In England, independent journeyman organizations arose only after the national dominance of the London livery companies began to wane during the late seventeenth and early eighteenth centuries. Elsewhere in premodern Europe, formal organizations of journeymen were poorly developed or nonexistent because many towns and states took strongly repressive actions against them, and because their services were less needed in the more densely urbanized regions, such as northern Italy and the Low Countries. The development and the workings of markets in skilled labor have nevertheless received little attention. The effects of journeyman mobility on technological progress and on the persistence for centuries of skills-intensive "industrial districts" across Europe are equally unexplored.

[See also *Apprenticeship and Craft Guilds*.]

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**JUTE INDUSTRY.** Until the development of cheap synthetic substitutes, jute was second only to cotton as a textile fiber. In 1960, jute accounted for a quarter of world textile fiber production. Jute is used for yarn or as a durable

coarse fabric. Most of the world's supply of jute is grown in Bengal, on the Indian subcontinent, which has the requisite hot, humid climate. The fiber comes from annual plants and is extracted by "retting" their stems in slowly running water.

For a long time, jute had been used in India for making cloth, but the fiber was first exported in 1796 by the British East India Company, which sent some to a twine factory in Abingdon, in Berkshire, England. The major export market for jute fiber, however, became Dundee, Scotland. In the early nineteenth century, Dundee had a diversified industrial structure, including a linen industry, based by then on flax imported from the Baltic. A little jute was brought to Dundee in 1823, but the fiber proved difficult to spin. By the early 1830s, persistent experiments had solved the major problems of adapting flax spinning and weaving processes to jute. Significant jute production developed in Dundee through a combination of factors. The supply of rival fibers was affected: there was uncertainty about Russian flax supplies, which were threatened by the Crimean War (1854–1856); and there was a world shortage of cotton as a result of the American Civil War (1861–1865). The demand for cheap cloth rose exceptionally because of these and other wars of the 1850s and 1860s (jute was used for sandbags) and because of the opening up of the American West.

Imports of jute into Dundee therefore rose markedly, as shown in Table 1, and peaked in the 1890s.

The impact on Dundee was striking. The city's population nearly doubled between 1851 and 1881 (from 78,931 to 142,154), and by 1881 half the city's population was employed in jute processing. Dundee had turned into "Juteopolis." Calcutta, too, benefited from the trade with port improvements, and production of the fiber was important to the income of small farmers in Bengal.

As jute products became familiar, processing capacity was established elsewhere in the world. There was some jute manufacturing in continental Europe, but the

TABLE 1. *Annual Imports of Jute into Dundee*

DECADE	AVERAGE IMPORTS PER YEAR (THOUSAND TONS)
1830–1839	1
1840–1849	6
1850–1859	23
1860–1869	60
1870–1879	116
1880–1889	172
1890–1899	335

SOURCE: Adapted from Lenman, Lythe, and Gauldie, (1969), p. 105.