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Feet and Fabrication: Footbinding and Early Twentieth-Century Rural Women’s Labor in Shaanxi

Laurel Bossen¹, Wang Xurui², Melissa J. Brown³, and Hill Gates³

Abstract
The early twentieth-century transformations of rural Chinese women’s work have received relatively little direct attention. By contrast, the former custom of footbinding continues to fascinate and is often used to illustrate or contest theories about Chinese women’s status. Arguing that for rural women at least, footbinding needs to be understood in relation to rural economic conditions, the authors focus on changes in textile production and in footbinding in two counties in Shaanxi province. Drawing on historical sources and their own interview data from rural women who grew up in this period, the authors find evidence that transformations in textile production undercut the custom of footbinding and contributed to its rapid demise.

Keywords
Chinese women, footbinding, textile production, Shaanxi, cotton

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Introduction: Reconsidering Chinese Women's Work and Footbinding

Binding young girls' and women's feet in order to make them smaller was once very widespread in China, almost synonymous with Han Chinese womanhood. Imposed on young girls when they had little or no power to resist, footbinding painfully crushed or compressed girls' feet by bending them, often until bones broke, into a smaller, narrower shape. The process took years to complete, but permanently changed the feet so that later unbinding could not restore their natural form. Footbinding greatly inhibited the mobility of Chinese girls and women for the rest of their lives. It permanently stopped their running, slowed their walking, and reduced their balance. It limited their ability to do many kinds of physical work outside the home. As they aged, many women could only walk with canes. It is estimated that the practice of footbinding lasted nearly a thousand years.

The origins of footbinding during the Song dynasty (960–1279), the reasons for it, and its distribution and spread prior to the twentieth century are hazy (Ebrey, 1993; Turner, 1997: 444). Scholars have proposed numerous theories about the reasons for footbinding and its persistence. Reflecting on the experiences of urban, elite women, some interpret footbinding as an expression of male dominance or as a demonstration that families did not need their women's labor. Still others interpret footbinding through the lenses of sexuality, fashion, prestige, and beauty (Hong, 1997; Jackson, 1997; Ko, 2001, 2005; Levy, 1991; Wang, 2002). Historian Dorothy Ko argues that Chinese women demonstrated their artifice, skill, and pride in the achievement of beauty. She enjoins us to see footbinding not simply as the oppression of women, but as a source of satisfaction and superiority. Beverley Jackson dubs footbinding an "erotic tradition," a view contested by Hill Gates (2008), who found little evidence for its sexiness. Tiny, bound feet encased in embroidered silk slippers could increase a woman's attractiveness in marriage. Yet footbinding was not only practiced by elite or urban populations, it was also widespread among rural women whose families could hardly dispense with their labor for fashion, prestige, beauty, or the foot as erotic plaything.

Despite widespread interest in the practice, few studies have attempted to analyze the spatial and class variations in footbinding, and what kinds of work women could do with bound feet. Christena Turner (1997), who roughly mapped the distribution of footbinding intensity by province using anecdotal evidence from travel writings and diaries, noted that there was not enough information to generalize about women in large rural areas. With the exception of research by Hill Gates in Sichuan and Fujian, and by Laurel Bossen in
rural Yunnan, there has been little previous investigation of the actual distribution of this bygone practice in rural areas and in relation to women's work within China's immense population (Gates, 1997a, 1997b, 2001, 2005; Bossen, 2002, 2008).

Footbinding, we propose, was more than a symbol of beauty; it was an integral part of an economic system depending on women's intensive domestic handwork in textiles. The young woman with bound feet was "attractive" to her husband's family in part because her small feet and handmade shoes proved she was already accustomed to sedentary handwork. Different forms of handwork, varying by locality, were very common in preindustrial China. They included transforming fibers (silk, cotton, hemp, and others) into yarn, thread, cloth, shoes, and nets, as well as making straw and wicker mats and baskets. Many of these products were not just for home use, but entered into circuits of local and long-distance trade. Women's heavy workload meant that they had to enlist their daughters' help at a young age, and mothers-in-law needed to know that their daughters-in-law had the skills and diligence for textile work. Examining changes in rural women's work in different regions is crucial to understanding the nature of China's early twentieth-century economic transformations and crises, as well as the distribution, tenacity, and demise of rural footbinding. Even though rural women were the vast majority of the female population in the early twentieth century, their conditions of work and footbinding have been the least recorded and analyzed. The women themselves were largely illiterate and left few records. Yet in the early twenty-first century, rapidly dwindling numbers of elderly rural women who experienced footbinding survive and can tell us something about its place in rural life and livelihoods. Our research has tapped their memories.

This article focuses on women's labor and footbinding in Shaanxi province. The research is part of a larger project reevaluating the economic transformations of the early twentieth century and their impact on rural girls' and women's work in China. The larger project will include comparative data from other provinces. Here we report in detail on just one part of our comparative study. We present evidence for village women's work patterns and footbinding prevalence to explore their correspondence to the economic needs and strategies of rural households in managing household labor.

We suggest, first, that rural women were historically engaged in productive labor as part of the family labor force. Second, in preindustrial China there was a commercial demand for products that required light labor or handwork, and women extensively engaged in manufacturing these products in cottage industries. Third, there was a strong connection between women's intensive labor in household textile production, or other kinds of hand labor, and the
practice of footbinding. In practical terms, footbinding prevented young girls from running and playing, and pushed them at an early age into the tedious and sedentary work of spinning and weaving or doing other handwork at home. Women who were themselves constrained by economic necessity to spend many hours seated at spinning wheel and loom enlisted their daughters' help at an early age.

In order to test the theory that footbinding was most common in areas where most women performed "light" labor such as spinning and weaving, we examine both the pattern of girls' and women's labor and footbinding as described in the literature for Shaanxi and our data collected from elderly women in two Shaanxi villages with respect to the 1920s and 1930s. We also examine the historical economic changes in transportation and trade that affected demand for village women's work. We consider whether the timing of the economic changes reducing the value of women's domestic textile production corresponded to the demise of footbinding in each area. As new technology and trade in factory-made yarns and textiles reduced commercial demand for girls' labor in domestic spinning and weaving, it would also have eroded the incentives for footbinding as a means of intensifying girls' and women's textile production. Examination of the timing and local results of the early twentieth-century upheaval in handcraft textile production can help determine whether this was a significant factor in villagers' decisions to discontinue footbinding. Our prediction is that displacement of women's handwork by industrial products would propel a rapid decline in footbinding.

The forces driving the decline of footbinding are complicated by social and political movements. Since the nineteenth century, reformers attempted to halt footbinding; governments tried to legislate against and suppress it.¹ No doubt these had some impact, particularly in urban areas. But by themselves, they may not have been the decisive factors in ending this custom. Villagers often resist changes imposed by outsiders and officials and continue to follow or return to custom as soon as government pressure is relaxed (Friedman, 2006; Ocko and Gilmartin, 2009).

Research Methods

Although footbinding of young girls stopped more than 60 years ago, many old women whose feet had been bound continue to live even into the twenty-first century. We draw on questionnaire and interview data from elderly women of rural Shaanxi as well as written sources on economic and social conditions in the early twentieth century. The data were collected by interviewing
100 elderly women in each of two administrative villages (xiang) in Shaanxi, with follow-up interviews with a smaller subsample of these women. In the selected villages, we aimed to interview 100 elderly women born into different cohorts before 1950, with a quota of 50 percent who were born before 1930. For each age group, we selected those who had the clearest memories for follow-up interviews.

We asked about girls’ and women’s work and footbinding before and after marriage. This division, combined with knowledge of their age and marriage age, allows us to specify the years in which they were working girls and teens. We also determined whether the women’s work was primarily “heavy” or “light.” Heavy work involves heavy lifting, pulling or pushing large loads, and long hours walking outside the home. Light work requires less mobility, less weight, and usually involves skilled hands as in hand spinning or weaving. We estimate the distribution of women’s handwork and consider its changing value in the larger economy, even though “value” was relatively difficult for our informants to specify. We analyze the timing of the decline in footbinding in relation to changes in the value of female light labor, particularly in textile production. Finally, local gazetteers and secondary sources supplement our interview data on the economic conditions rural women faced in each site.

Guanzhong: Early Twentieth-Century Economic Conditions

Far from the Pacific coast, Shaanxi province experienced later and less direct effects of overseas maritime trade, Western-style industrial development, and Western culture than eastern China. Shaanxi historically has been an important center for the production of cotton, the most important raw material for women’s work in textiles, yet little systematic research has been done on women’s work and footbinding in this province.

Shaanxi is usually divided into three ecological zones. Southern Shaanxi is a mountainous area belonging to the Han River valley. The central part, Guanzhong, where the Wei and Jing Rivers cross the province, is a temperate, fertile plain. The Wei River valley in Guanzhong is site of the first Chinese empire centered at Chang’an, near present-day Xi’an, located on the Silk Road that connected China and Central Asia. The northern part, Shaanbei, is a loess plateau with a drier, colder climate. Our two village research sites are located in Zhouzhi county, Guanzhong, just south of the Wei River, and in Luochuan county in Shaanbei. After analyzing change in Zhouzhi, we will examine Luochuan, a more remote county in Shaanbei.
In the early twentieth century, Shaanxi as a whole was relatively poor, with little industry and devastated by recurrent famines. While China’s east coast cities rapidly began to develop and adopt modern technologies at the end of the Qing dynasty (1644–1912) and the early Republican period (1912–1949), Shaanxi province, comparatively isolated in the far west, was left behind.

Guanzhong was the most developed region of the province, with a vast area of flat and rich farmland. During the Republican period, farming remained the main economic activity, with winter wheat and cotton as the main crops. Winter wheat was harvested in June, and cotton in October. Villagers also grew millet, maize, and sorghum as well as opium poppy and hemp. This was an area of small-scale peasant economy (Xingzhengyuan nongcun fuxing weiyuanhui, 1934: 1). Eduard Vermeer describes Guanzhong villages in the 1930s as small, closely knit, and largely self-supporting. Their usual size was 200 to 400 people, somewhat larger in the floodplain and smaller in the loess hills. Villages were mostly well in sight of each other, being so close and in a landscape almost without trees. (1988: 40)

Our first village site is located in Zhouzhi county in western Guanzhong (west of Xi’an). The population of the county around 1925 was nearly half a million. With access to water and some irrigated land, farmers in this county grew rice, corn, wheat, and beans for food, and raised cotton, hemp, mulberry trees, and silkworms for clothing (Chongxiu Zhouzhi xian zhi, 1925b: 9). Cotton was Shaanxi’s main commercial crop and the most important material used for textiles. With suitable climate and soil, Guanzhong produced 90 to 95 percent of the cotton grown in the entire province (Xingzhengyuan nongcun fuxing weiyuanhui, 1934: 1; Vermeer, 1988: 324). Shaanxi cotton had fine, long, and strong fibers, and was preferred by all the textile factories. It was well known among cotton merchants inside and outside China. In the 1930s, Shaanxi produced 340,000 dan (17,000,000 kg) of raw cotton a year, ranking as the sixth highest cotton-producing province in China. Its cotton was sold to Shanxi, Gansu, Henan, and Hubei provinces, and as far away as the cities of Tianjin and Shanghai and elsewhere (Longhai tielu guanliju, 1932: 434–35, 438).

From 1925 to 1932, cotton cultivation had to compete for land with opium. Cotton output decreased when the warlord government levied fines on farmers who did not grow opium, a government monopoly. In contrast, from 1934 to 1937, the Nationalist government conducted an opium eradication campaign...
in Guanzhong. Simultaneously, with improved transportation and higher cotton prices in 1935, cotton production expanded, with most of the cotton exported eastward to the North China plain. During 1934–1935, raw cotton comprised three fourths of the total value of Shaanxi exports. In 1937, the value of cotton raw materials (including cotton seed and oil) exported from Shaanxi was 17.5 percent of the national total for these products, almost double its share in national cotton output. By 1937, Shaanxi was thus a large exporter of raw cotton to eastern factories, transforming a relatively small portion of its raw cotton into cloth. Thereafter, cotton prices fell because the war with Japan hampered exports to the textile mills in Zhengzhou, Qingdao, and Shanghai (Vermeer, 1988: 325–27, 329, 332–33).

Spinning and weaving cotton had been the most important work for women in Guanzhong from at least the late Qing. Describing women’s work in Guanzhong in the 1930s, Vermeer notes that “cottage textile industry was common in all cotton growing areas, but some centers such as Xingping county had a tradition of manufacturing high-quality goods for wider sales.” (Xingping is just north of Zhouzhi across the Wei River. See Map 1.) He continues,

Almost every family in the county had a wooden loom. During the ’thirties much of the spinning was still done at home, but also cotton yarn was bought outside the county. The spinning was often done by old women or young girls, who spun 6 to 7 ounces (about 200 grams) of coarse yarn or 4 oz. of fine yarn per day. With a wooden loom, in one day a woman could produce 18 to 20 feet of cloth of the regular “sales cloth” type: a coarse yarn, only 9 inches wide, mediocre-quality cloth, with a length of 100 feet per roll. Weaving one roll would take almost a week, and if one person had to do both spinning and weaving, about one month. (Vermeer, 1988: 334–35)

Obviously, if girls’ labor was employed to do the less skilled work of spinning, an adult woman could weave much more cloth on the family loom. Vermeer also offers a glimpse of the link between domestic textile production and footbinding in western Guanzhong.

Because women (especially in the more backward western parts) still had bound feet, very few went to work with the men in the fields. Apart from managing the daily household affairs, women engaged in spinning and weaving, making straw hats, clothes, bamboo baskets, utensils, etc. (41)
In 1941, a survey of four villages of Xingping and Lintong counties showed that in Xingping, women who spun thread and wove cloth at home accounted for 30 percent of the population. These spinners and weavers outnumbered the male farmers, who formed 26 percent of the population (see Table 1).
Table 1. Occupations in Xingping County, 1941

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Percentage of the Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spinning and weaving</td>
<td>30</td>
</tr>
<tr>
<td>Farming</td>
<td>26</td>
</tr>
<tr>
<td>Commerce</td>
<td>5</td>
</tr>
<tr>
<td>Soldiers</td>
<td>3</td>
</tr>
<tr>
<td>Industry</td>
<td>1</td>
</tr>
<tr>
<td>Other jobs</td>
<td>2</td>
</tr>
<tr>
<td>Students</td>
<td>7</td>
</tr>
<tr>
<td>Elders, disabled, or children</td>
<td>27</td>
</tr>
<tr>
<td>Total</td>
<td>101</td>
</tr>
</tbody>
</table>

Source. Adapted from Xiong and Wang, 1942: 10.
Note. Total does not add to 100 due to rounding.

weavers produced a large amount of local handmade cloth (tubu) both for home use and for sale to Gansu province, 300 miles away (Longhai tielu guanliju, 1933: 412). Cotton and especially handmade cloth were the main commercial products and sources of income in Xingping.

Zhouzhi Textiles: Village Cotton

Spinning and Weaving

In the 1920s, women’s work in Zhouzhi also focused on textiles. Every woman learned how to spin cotton or twist hemp (Chongxiu Zhouzhi xian zhi, 1925b: 9). The local people mostly wore homespun, handwoven cloth, known as cubu or “rough cloth.” Hu county, just east of Zhouzhi, similarly reported that cotton was the major commercial crop, and textile production was all done by hand in the early 1930s (Hu xian xiangtuzhi, 1937: 6). Fine cloth (yangbu, referring to foreign or factory-made cloth) was available for purchase in market towns or cities. Thus, factory cloth was already competing in the region, even if villagers rarely wore it. Facing competition with manufactures from the east, locally produced cotton cloth was sold to more remote areas north of the Wei River and sometimes west to Gansu province (Chongxiu Zhouzhi xian zhi, 1925a: 19; 1925b: 29).

Our Zhouzhi survey data from elderly village women are consistent with the general picture of western Guanzhong. Most women (91 percent) learned to spin cotton as girls in their natal home. Seventy-three percent spun cotton mainly for family use. Another 18 percent reported spinning for sale, wages, or exchange as well as for family use, and only 9 percent did not spin at all.
Figure 1. Zhouzhi: Percentage of women reporting spinning as girls, by year when cohort reached age 8
Source: Interviews in 2006 with Zhouzhi elderly women (N = 101).

Figure 1 shows that this skill was nearly universally learned by girls (at age eight) up to about 1932, and then a shift away from spinning slowly began. The percentage of women who (as unmarried girls) reported spinning partly for sale, exchange, or wages declines steadily by age cohort, starting from over 40 percent for girls reaching age ten in the 1920s, and dropping to 24 percent and 15 percent in the 1930s and 1940s, respectively.

Most women also learned to weave before marriage (Figure 2). One hundred percent of girls reaching age fifteen by 1934 wove at home; thereafter, the rate gradually declined to less than 75 percent for those who reached age fifteen between 1945 and 1954. Ownership of looms in women's natal families also fell slowly from 80 percent for women born before 1920, to around 60 percent for those born in the 1920s, and close to 50 percent for those born in the 1930s and 1940s. In areas such as Zhouzhi that grew and exported large amounts of cotton, village women did not have to buy cotton. Thus, spinning and weaving as domestic, feminine skills could continue for home use even though low market prices for yarn and cloth meant that homespun and hand-woven cloth were increasingly unable to compete with factory production.
The timing of the gradual shift away from hand spinning and weaving in Zhouzhi villages is compared below to the time when new transportation (motor roads and railways) and trade connections were created. Before the coming of the railway and modern motor roads, trade and transport in Zhouzhi as in the rest of Guanzhong was mainly by foot, animal-drawn cart, or riverboat. Even though cloth was produced at home by hand labor, this production was linked to wider commercial networks through merchants who bought local cloth for sale in Shaanxi and Gansu markets. The transportation changes of the 1930s opened Shaanxi town markets to increasing competition with factory-produced yarns and cloth from eastern China.
Shaanxi's Changing Textile Trade in National Context: Yarn and Cloth Imports

As early as the mid-nineteenth century, China already imported industrial textiles that entered the circuits of internal commerce. In 1910, the value of imported cotton products from outside China accounted for 28 percent of all the imported goods, and spun thread accounted for nearly half of all imported cotton products and was still increasing (Feuerwerker, 1995: 65; Li, 1931: 2). Silk, cotton, and wool textiles imported from outside China each year were worth 0.4 billion yuan, ranking first among imported products for all of China (Longhai tielu guanliju 1933: 434).

China also developed its own textile industry. Toward the end of the Qing dynasty, China's earliest weaving and spinning factories were located in the east, in Shanghai, Wuhan, and Nantong (in Jiangsu province), and more and more textile factories were set up in the next thirty years, mostly concentrated in Jiangsu and Zhejiang provinces. The only one in northern China was in Henan province. As late as 1916, there were no other textile factories in the north or northwest of China (Li, 1931: 3; Chao, 1977).

Factory-made cloth, whether imported or domestic, began to make inroads in Shaanxi markets early in the twentieth century. As early as 1916, considerable amounts of factory cloth were being transported to Shaanxi from Hubei province (Li, 1931: 3). Between 1929 and 1931, an average of about 5,129 tons (dun) (5,129,000 kg) of cloth was transported each year by train to Lingbao near the Henan-Shaanxi border, and by land transport into Shaanxi on the newly widened dirt road to Xi'an (Longhai tielu guanliju, 1933: 434–35; Kohler, 1958: 6–8; Vermeer, 1988: 49–51). Additional spun thread, cloth, and silk were shipped to Shaanxi by water transport from Shanxi province. In many county cities, the most common shops were cloth shops, accounting for 17 percent of all shops. In eastern Guanzhong, with water transportation on the Yellow River and the Wei River as well as roads between Xi'an and Tongguan, the markets were busy with trade from the neighboring provinces of Shanxi, Hubei, and Gansu. Cotton products included raw cotton produced in the local area as well as cotton cloth from Shanxi and Hubei province (Longhai tielu guanliju, 1933: 434, 497).

The supply of factory-made cotton yarn also shot up in the early twentieth century. According to Thomas Rawski, factory yarn as a percentage of China's domestic supply (by weight) rose from zero before 1880, when all yarn was handspun, to 17 percent by 1901–1910. Factory-spun yarn surpassed 75 percent of the total from 1931 to 1936 (Rawski, 1989: 93). Faced with such massive displacement of handspun yarn in just three decades (see Figure 3), women and girls who worked at home faced a crisis. In the Shanghai market, the margin between the price of yarn and of cotton declined...
Figure 3. China: Handspun yarn as percentage of all yarn (excluding net imports), by weight and value added, selected periods

Source: Adapted from Rawski, 1989: 92.

from 1928 to 1936 (Chao, 1977: 123); the price of handspun yarn fell due to the competition from factory yarn, while factory demand for cotton drove up the price of raw cotton, making it too expensive for spinning households in non-cotton-growing regions. Describing the Yangzi delta in the early twentieth century, Philip Huang reports that the labor productivity difference for hand spinning as compared to machine spinning was 1 to 40. As a result, yarn prices had dropped so close to the price of cotton that hand spinning was “virtually wiped out” (Huang, 2002: 519). This transformation was not confined to the east coast. Kang Chao notes that “factory yarn reached almost every corner of the country by the 1930s” (1977: 173; see also Grove, 2006). As modern transport accelerated and intensified trade with China’s industrial centers, mechanization of cotton cloth and yarn production on a national scale undoubtedly created fierce competition for Shaanxi’s women spinners and weavers.

Guanzhong: The 1930s
Transportation Revolution and Changing Textile Technology

During the Republican period, before the coming of the railway, economic development of Guanzhong was relatively slow, with severe rural poverty and
depopulation due to prolonged drought and famine (1928–1934). Important changes in technology and transportation took place in the 1930s. Modern transportation in the form of railways and trucks on widened dirt and asphalt roads, and modern industry, especially modern textile industry, began to develop in Shaanxi.

Railway construction entered Guanzhong from Henan in the east and moved westward toward Gansu. In 1931, the Longhai Railway was extended from Lingbao, Henan, to Tongguan, the eastern entrance to Shaanxi.12 In 1934, it reached Xi’an, and two years later the cities of Xianyang and Baoji (Zhang and Shi, 1997: 192; Vermeer, 1988: 50–54). As Vermeer noted,

> The connection of Xi’an with the Longhai railroad was the beginning of a new economic era for Guanzhong. The line was very successful. The 1936 import volume of Xi’an for major goods such as cotton cloth, kerosene, and iron and steelware was four to five times as much as three years before. (54) (See Map 1, Insert A.)

In addition, the road network was modernized under the Nationalist government. Up to 1931, Guanzhong had only one improved dirt highway, the 380-kilometer-long section of the Old Silk Road from Tongguan in the east to Lanzhou in Gansu. By 1942, there were 2,200 kilometers of widened roads, with important east-west sections of asphalt or gravel maintained by troops. The Tongguan-Xi’an-Lanzhou highway established regular truck and bus transportation for civilians in 1936, notably conveying cotton cloth west from Xi’an (Vermeer, 1988: 48–52). The influx of machine-spun yarn and cloth was temporarily disrupted during the war with Japan from 1937, but the war years also stimulated road construction and industries for supplying troops and markets in western China (48–52).

Spinning and weaving technology in Shaanxi remained largely manual until the extension of the Longhai railway into Guanzhong in 1934 (Vermeer, 1988: 334). Vocational schools with weaving workshops had been set up in counties with abundant cotton, but all the looms were for hand use. In 1929, the Minsheng weaving workshop was established in the county seat of Zhouzhi using improved hand looms that could produce 66 meters of cloth per day, but it closed in 1935 (Wang, 1993: 185). A 1931 survey of industry reported there were still no well-organized, large-scale mechanized factories in Guanzhong (Longhai tielu guanliju, 1932: 435, 439–40, 497). In response to the new railway, the first mechanical textile factory in northwestern China, the Chang’an Dahua Textile Factory, was built in Xi’an in 1936 (Zhang and Shi, 1997: 192). Owned by a company with cotton mills in Shijiazhuang and Hankou, the
Dahua factory housed 25,000 spindles and 820 looms and employed a labor force of 600 male and 300 female workers. Most of the female workers were hired from Hubei, since the factory found it difficult, at least initially, to hire and retain local women (Vermeer, 1988: 74, 344). The reasons local women were not initially “available” are not given in Vermeer or his source, but two reasons seem likely. One is that women were not yet accustomed to working outside the home for nonfamily members. The other is that local women with bound feet were less efficient at working at the spindles or looms so that women were brought in from areas where footbinding was no longer practiced. This speculation is consistent with reports from eastern China that “weavers with bound feet could not move rapidly enough to attend many looms” (Chao, 1977: 158–59, citing an observation by Pearse, 1929: 221).

During the war with Japan, many industries moved to Shaanxi from the eastern war zone. These included textile factories such as the Shenxin Spinning Factory from Hankou (Wuhan), Hubei province, the Hubei Official Cloth Works, and others (Zhang and Shi, 1997: 239). In addition to these large cotton mills, many small handicraft factories arose to meet demand, reaching 106 registered textile plants by 1943, mainly in the larger towns of Guanzhong (Vermeer, 1988: 345–46). The effect of industrialization and concentration of textile production was both increased efficiency for industrial workers and decreased income for hand spinners and weavers working out of their homes.

While larger factories were being established, handcraft technology was also changing. In 1937, the Shaanxi provincial government promoted improved hand spinning and weaving technologies for local cloth, tubu. In 1939, a department for improving handicraft spinning and weaving was established and training schools for spinning and weaving were built in Sanyuan, Xingping, Lintong, Chang’an, and elsewhere. In these counties, residents learned to use a new kind of manual loom that could weave wider cloth (Zhang and Shi, 1997: 240). It is not clear whether these were wider wooden looms or iron-gear looms or whether any of these schools were located outside the county towns. According to Vermeer, “improved iron looms which were gradually introduced during the thirties could produce three times as much” as the traditional wooden looms (1988: 334). The impact of iron looms on home weavers in Guanzhong in the 1930s is comparable to the impact on home weavers in Ding xian, Hebei province, where they were introduced in the 1920s (Gamble, [1954] 1968: 302; Bossen, 2002: chap. 3; Grove, 2006). Iron looms were about four times as fast as traditional wooden looms. Their greater efficiency meant that weavers with iron looms could sell cloth for less than those using traditional looms. In general, the adoption of iron-gear looms by village women...
Table 2. Changes in Trade, Transportation, and Industrial Cotton Textile Production (1900-1939): Guanzhong Region, Shaanxi Province

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1909</td>
<td>Longhai RR completed from Kaifeng to Luoyang, Henan</td>
</tr>
<tr>
<td>1910</td>
<td>Imported cotton products account for 28 percent of all imported goods, of which nearly half were spun yarn</td>
</tr>
<tr>
<td>By 1911</td>
<td>First textile factories set up in East China: Shanghai, Wuhan, Nantong</td>
</tr>
<tr>
<td>1912</td>
<td>Qing dynasty ended</td>
</tr>
<tr>
<td>1916</td>
<td>Factory cloth began reaching Guanzhong from Hubei</td>
</tr>
<tr>
<td>1920</td>
<td>A Xi'an textile factory used manual spinning and weaving technology</td>
</tr>
<tr>
<td>1921</td>
<td>No large-scale textile factories operated in Guanzhong</td>
</tr>
<tr>
<td>1923–1925</td>
<td>Opium (for taxes) covered half the farmland of Guanzhong</td>
</tr>
<tr>
<td>1929–1931</td>
<td>Roughly 5,000 tons of cloth imported yearly to Shaanxi by train to west Henan and newly constructed road between Tongguan and Xi'an</td>
</tr>
<tr>
<td>1929</td>
<td>Zhang Xiaoxian set up the Minsheng weaving factory in Zhouzhi. Each machine could weave 66 meters of cloth per day. It closed in 1935</td>
</tr>
<tr>
<td>1928–1934</td>
<td>Drought and severe famine beset Guanzhong</td>
</tr>
<tr>
<td>1931</td>
<td>Longhai RR reached eastern Shaanxi</td>
</tr>
<tr>
<td>1934</td>
<td>Longhai RR reached Xi'an</td>
</tr>
<tr>
<td>1936</td>
<td>First modern textile factory, Chang'an Dahua, established in Xi'an</td>
</tr>
<tr>
<td>1936–1938</td>
<td>Longhai RR reached Xianyang and Baoji (west of Zhouzhi)</td>
</tr>
<tr>
<td>1937–1939</td>
<td>Department of Textiles promoted improved spinning and weaving technology; training schools for new looms weaving wider cloth were started</td>
</tr>
</tbody>
</table>


weavers was impeded by their greater initial cost and by the fact that bound feet were unsuitable for the foot pedals (Chao 1977: 184). The competition from more efficient iron-gear looms and factory cloth diminished the ability of women and girls to exchange their products for a viable income. In some regions, the early and widespread adoption of iron-gear looms using factory yarn in the 1930s allowed handwoven cloth to remain competitive with factory cloth. Linda Grove links the shift from female-centered to male-centered weaving in Gaoyang, and in Ding xian, Hebei, to adoption of iron-gear looms and factory yarn (2006: 80–82, 97). Table 2 gives a chronology of technological changes and important events affecting textiles.
Table 3. Imports to Guanzhong Before (1932) and After (1936) the Longhai Railway Reached Xi'an

<table>
<thead>
<tr>
<th>Product</th>
<th>Unit</th>
<th>June–Dec. 1932</th>
<th>Jan.–June 1936</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese cloth</td>
<td>1,000 rolls</td>
<td>180</td>
<td>839</td>
</tr>
<tr>
<td>Chinese gauze</td>
<td>1,000 rolls</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Cotton yarn</td>
<td>1,000 kg</td>
<td>36</td>
<td>60</td>
</tr>
<tr>
<td>Foreign shirts</td>
<td>1,000 pieces</td>
<td>26</td>
<td>51</td>
</tr>
</tbody>
</table>


Vermeer observes that throughout Guanzhong small cotton-cloth handcraft producers “suffered greatly from the increase of imported factory-made cloth after 1934. In most areas rural women gave up handicraft weaving, or only wove for household consumption” (1988: 335). Table 3 shows that in the four years from 1932 to 1936 yarn imports into Guanzhong increased by two thirds, while imports of Chinese-produced cotton cloth increased more than fourfold. These rapid changes cut into the market for women’s spinning and weaving. For instance, as the table shows, 839,000 rolls of cloth were imported from January to June 1936. If we use Vermeer’s estimate of one woman producing one roll per month, that figure represents the equivalent of 70,000 woman-years of cloth, a drastic drop in market demand for local handwoven cloth.

Handcraft production bounced back somewhat in 1937 after the outbreak of the war against Japan and the disruption of imports of machine-made textiles from the east. But the establishment of mechanized factories and the introduction of iron looms in towns meant that production of handwoven cloth “with old-type wooden looms by women at home” suffered greatly (Vermeer, 1988: 335). Domestic handmade textile production continued to face intense competition from more efficient technologies even with the wartime disruptions of transport.

The authors of the Longhai Railway Bureau explained the late industrialization of Guanzhong in terms of (a) warlord demands for opium production and taxation in the 1920s, (b) the 1928–1934 famine, and (c) villagers’ resistance to technological change and to quality improvements in spinning and weaving (Longhai tielu guanliju 1933: 440). Clearly, the handmade textile products local women produced at home were not competitive once the economy was fully opened up to industrially produced textiles. Local cultural resistance is understandable given the fact that these changes lowered the commercial value of women’s labor and did not immediately create any new jobs.
for illiterate and footbound women who had been raised to spin and weave. As relatively distant recipients of technological diffusion and innovations originating from the east, Shaanxi village women were latecomers facing serious disadvantages.

**Footbinding Changes in Zhouzhi**

Based on the limited literature available for women in the Republican period, Turner classified Shaanxi as a province in which “all women practice footbinding” (1997: 447). The village data we have collected show that this was likely true in 1900, but was beginning to change. Our survey of elderly rural women allows us to identify the changing patterns of footbinding in the early twentieth-century villages. The 1925 Zhouzhi gazetteer reported that a Natural Foot Association (Tianzu hui) was established by officials in Zhouzhi’s county seat but did not specify the year it was established. The association sent people out to villages to promote the natural foot. Those women and girls who released their feet were rewarded while those who did not were punished. The gazetteer authors wrote that henceforth the customs in the villages started gradually to change (Chongxiu Zhouzhi xian zhi, 1925b: 12–13). However, as we shall see, even though footbinding did show a slight decline for those born in the 1920s, people resisted this change and footbinding persisted with new binding of girls born in the 1930s.

A village woman born in 1928 related some of the economic challenges in this transitional period. When she was small, her family grew opium for use and sale (under the warlord government until the Nationalist government’s opium eradication campaigns in the 1930s). When she was seven years old (around 1935), they switched to growing cotton for use and sale. Because her feet were already bound, her father carried her on his back out to the fields to pick cotton. Apart from picking cotton, she mainly worked at spinning “the whole day” (zhengtian) and later at weaving cotton cloth for use and sale. She also reported reeling silk and weaving silk mixed with cotton to make shirts for other people. Despite her bound feet, when raw cotton prices were high, and spinning and weaving incomes were dropping, she was needed for field work. She also continued spinning and weaving for family use. Her account illustrates the use of child labor, and the conflict between preparing a child for hand labor with bound feet versus field labor, which required mobility.

For the women of Zhouzhi, the average age of binding can be analyzed by age cohort to determine whether it changed over time. Table 4 and Figure 4 show slight differences in the average age of binding for each cohort and among the age ranges. Due to small sample size, we cannot determine whether
Table 4. Zhouzhi Elderly Women’s Birth Year, Average Age of Binding, and Years to Begin Binding

<table>
<thead>
<tr>
<th>A) Birth Year</th>
<th>B) Average Age of Binding (Years)</th>
<th>C) Years to Begin Binding (A + B)</th>
<th>D) Age Range of Binding (Years)</th>
<th>E) Number in Cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td>1910—1919</td>
<td>7.1</td>
<td>1917—1926</td>
<td>7—13</td>
<td>7</td>
</tr>
<tr>
<td>1920—1924</td>
<td>8.0</td>
<td>1928—1932</td>
<td>6—15</td>
<td>12</td>
</tr>
<tr>
<td>1925—1929</td>
<td>8.9</td>
<td>1934—1938</td>
<td>5.5—14</td>
<td>17</td>
</tr>
<tr>
<td>1930—1939b</td>
<td>8.4</td>
<td>1938—1947</td>
<td>7—14</td>
<td>9</td>
</tr>
</tbody>
</table>

Source. Interviews in 2006 with Zhouzhi elderly women whose feet had been bound.
a. Women reported ages in the customary shu sui, counting birth as age one. The ages above use the Western system of counting completed years. Hence, one year was subtracted from women’s answers.
b. One woman born in 1941 reported her mother bound her feet at age four for a very short time, but stopped “because it hurt.” There were no other cases of women born in the 1940s whose feet were bound.

Figure 4. Zhouzhi county: Elderly women and percentage footbound by binding year (age 7)

Source. Village interviews in Zhouzhi county, November to December 2006, with 102 elderly women about their own feet (i.e., “first foot”), plus eyewitness data from a subsample of 17 longer interviews about parents’ and grandparents’ generation. Binding age here is an estimate based on birth year plus seven years. Individual “first-foot” refers to feet “ever” bound, even for a short period, whereas eyewitness recall data refer to feet that were permanently transformed into adulthood and seen by the woman interviewed.
the fluctuations in binding age are random or influenced by changes in the textile economy. The average age of footbinding was around seven up to 1920, and varied between ages eight and nine for those born afterward. The rising age of binding might be interpreted as a sign that hand spinning was declining as cheaper factory yarn entered the market; hence it would have been less urgent to make girls sit still and begin spinning at such a young age.

The questionnaires provide two kinds of data. "First-foot" refers to the woman’s direct experience with her own feet, for a sample of 102 women. “Eyewitness recall” data refer to women she knew whose feet she saw. The eyewitness recall data come from a subsample of elderly women who were asked about their direct knowledge of specific lineal and collateral relatives (father's and mother's kin, mother- and father-in-law’s kin, own siblings and spouses, husband's siblings and spouses). In the absence of specific birth date information, it was estimated that each generation was twenty-five years. For collateral siblings, it was assumed that parents' elder siblings and spouses were two years older and parents' younger siblings and spouses were two years younger than ego’s parents. In most cases, these assumptions did not alter the age cohort.

Figure 4 shows that in Zhouzhi county, women born from 1860 to 1920 nearly all had their feet bound. Among the few cases that were not bound, women explained that they came from out of province or were orphaned and had no one to take care of them. From 1930 to 1940, families rapidly discontinued the practice. The proportion of girls whose feet were bound dropped dramatically from 83 percent for those born from 1925 to 1929 to just 33 percent for those born from 1930 to 1934. For girls born in the 1930s, some were bound for only a short time and unbound again before their feet were permanently transformed. For girls born after 1945, the days, years, and centuries of footbinding were finally over.

Informants generally do not remember this transformation, which came about rapidly within a decade, as a product of political change. Some mentioned that various government inspectors enforced a ban on footbinding and even unbound women’s feet, confiscating the bindings, or levying fines for the offence. However, women resisted the change and continued to believe that footbinding was important for arranging a good marriage; many reported hiding from inspectors and surreptitiously resuming binding after the campaign was over. On the other hand, many of those who abandoned footbinding explained that “society changed” or “fashion changed.” How were “society” and “fashion” able to stop so suddenly a severe bodily practice that had persisted for centuries despite previous government bans?

It is unrealistic to expect that village women and girls, who were almost universally illiterate, understood the global economic forces that were changing
their household economies. Old women asserted that as young girls they simply did what their elders told them to do. If they protested, they were beaten. Why did their elders suddenly change their mind and stop insisting upon this practice? Even though villagers do not explicitly mention the changing markets and prices that affected their livelihoods, we can surmise that they were in fact affected.

Given the timing of the highway building for motorized transport in the 1930s, and the Longhai Railway reaching Xi’an by 1934 and Baoji by 1938, cloth and yarn from eastern textile factories suddenly flooded the area in large quantities, as discussed above. The textile workshop in the Zhouzhi county seat from 1929 and the mechanized textile factories in Xi’an from 1936 onward also vied for markets previously dominated by home-spun and home-woven products. The cloth markets to the west of Shaanxi, previously served by the home weavers of Zhouzhi and Guanzhong, now had many new suppliers.

Summarizing the impact of the railway in the 1930s in relation to modernization, Vermeer contrasts the rejection of footbinding in eastern Guanzhong with its persistence in western Guanzhong.

Western Guanzhong and also the northernmost counties (mountainous and close to the Communists) remained almost unaffected by these developments, while the rural areas of central and eastern Guanzhong, especially those near the railway, caught up with modern times. Contemporary sources described the western areas as exhausted by the Famine [of 1928–1934], very backward and unsafe. Footbinding was common in the west but already rare in the east. (Vermeer, 1988: 408)

This contrast of east and west supports our view that the rapid influx of factory textiles following the improvement of transportation systems led to the decline of footbinding in rural Shaanxi. Like the changes in textile technology and in transport, the rejection of footbinding by rural families generally started in the east and traveled to the west.

### Luochuan County, Northern Shaanxi

Our second research site is in Luochuan county in the southern part of Yan’an prefecture in Shaanbei. The physical contrast to the flat fertile lands of Guanzhong is captured by Pauline Keating: “Weather-whipped hills, aridity, and a savage and perfidious climate are the general features of the area”; “Torrential summer rains over millennia have savagely eroded the entire
northwest loess plateau, sculpting a landscape that is everywhere dissected by a maze of gullies and cavernous ravines” (Keating, 1997: 15, 22).

As in northern Yan’an, many villagers in Luochuan have “cave homes” (yaodong) carved out of the deep silt that characterizes the region. Villages are dispersed in a landscape of deep ravines, making transportation difficult. Sparsely populated, Luochuan county had only about 44,000 people in 1932, increasing to 58,363 by 1945, with an average of 5.1 persons per household.18

Compared with Guanzhong, there are fewer historical records about this region.19 Part of Yan’an prefecture belonged to the Shaan-Gan-Ning Border Region, the Communist base area with legendary status in the history of the China. Yan’an was where the Long March ended in 1935 and the Communists governed during the Anti-Japanese and Civil wars. Luochuan is about 40 to 50 kilometers south of the base area. Communist influence was certainly present, yet political instability meant that neither the “reds” nor the “whites” had absolute control of the area. Studies of the Yan’an base area describe changes affecting women’s work during the 1930s and 1940s, but the Communist economic and political reorganization did not apply to Luochuan, which remained under Nationalist jurisdiction.20

In contrast to Guanzhong, northern Shaanxi grew little cotton. With fewer than 180 frost-free days a year, the climate was not ideal for that crop (Vermeer, 1988: 324). Our Luochuan village data show that cotton was grown by only 10 percent of the women’s natal families, and only 2 percent of their marital families. About 10 percent also reported that their natal families raised silkworms in this region, but only one woman reported raising silkworms after marriage. Cotton and silk for home spinning and weaving were indeed scarce. Despite difficult transport, this region had to import cotton. The closest cotton growing areas for Luochuan (named by elderly traders who traveled there) were in northeastern Guanzhong towns such as Hancheng, Chengcheng, Fucheng, Heyang, Baishui, and Dali (see Map 1, Insert B).

The 1944 Luochuan gazetteer states that townswomen had not been in the habit of spinning and weaving for more than a hundred years. For their clothing needs, they relied on outside sources. Unfortunately, this source does not tell us about village women. It does cite earlier reports for the region complaining that the local men were too lazy to do business and the women were too lazy to spin and weave. But, another section on clothing says that the people used cubu, or “rough” home-woven cloth (Yu, 1944: 164, 504). These impressionistic comments suggest that villagers probably produced enough for their own use, but not enough (or not high enough quality) for the town market. Most likely, townpeople bought outside cloth from shops and markets at prices too low to compensate local spinners and weavers who had to...
buy nonlocal raw cotton or thread at high prices and lacked the improved technology to increase their output.

The technological changes affecting Luochuan in the 1920s and 1930s are difficult to trace in this relatively peripheral area. Until the improvement of roads north from Xi'an, goods had to be transported overland by foot, pack animal, or animal-drawn cart from the south. By 1936, a road had been widened, for Edgar Snow reported traveling by car on the "newly completed motor road" from Xi'an through Luochuan on his way to the Communist base area in Yan'an ([1938] 1968: 54). Unlike Zhouzhi, which was close to the Longhai railroad running across Guanzhong, Luochuan was relatively isolated and lacked a railroad link to other markets.

**Rural Luochuan Home Industry**

We have seen that factory production reduced prices for yarn and cloth relative to the price of raw cotton. Early in the twentieth century, townsfolk in Luochuan reduced their reliance on rough homemade cloth. The returns to those villagers who bought cotton to spin and weave at home with old spinning wheels and looms must have declined when cloth from other regions entered local markets. This could account for the disparaging remarks about Shaanbei women's laziness and low textile output in early-twentieth-century gazetteers (Yu, 1944: 164). Moreover, factory demand for Guanzhong cotton may have diverted cotton supplies from Shaanbei to more lucrative markets. By 1937, the outbreak of war with Japan and the blockade preventing trade with east China created a large demand for cloth in Shaanbei that could not easily be met by traditional hand spinning and weaving methods. The Communist base area in Yan'an and the Nationalist-controlled area of Luochuan both had to cope with this cloth scarcity (Mao, [1942] n.d.). As in Zhouzhi in 1939, a craft school was started in Luochuan and a cotton and wool spinning and weaving workshop was set up in Houzitou village in 1941. That was the first government stimulation of industry in the county. In 1943, a cooperative (hezuoshe) cotton and wool spinning and weaving factory was started in Luochuan. The 1944 gazetteer reported,

In 1941 the local government instigated a movement called "One Spinning Wheel for Every Household" (yi hu yi fangche) to promote women's home spinning and weaving and to prevent the tradition from dying out. Now, more than 4,000 women in the town are spinning, but the annual production of homespun yarn (tusha) is still very low. (Translated from Yu, 1944: column 12)
Both the Luochuan textile factory and an increased emphasis on village women’s hand spinning and weaving were government measures to increase cloth production during a time of war-induced scarcity.

Our survey data show that although Luochuan rural families barely grew any cotton, 73 percent of the elderly women learned to spin cotton thread for family use as girls in their natal home. Similarly, 71 percent spun cotton after marriage. Silk reeling, hand labor comparable to spinning, was also performed by about a third of the women before and after marriage. Taken together, 82 percent of the women surveyed hand-spun cotton or hemp or reeled silk by hand at their natal home and 72 percent spun or reeled thread at their marital home. The remainder did not spin or reel thread.

The proportion of women who wove cotton before marriage was relatively low (only 40 percent), mostly for home use. Girls usually learned to weave when they were older teenagers. Given the early marriage age of about sixteen, it is not surprising that 60 percent of women reported weaving cotton or silk after marriage. Two thirds of the women’s natal families and 57 percent of the marital families owned looms. Of the women born up to 1935, roughly 12 percent reported spinning, weaving, or braiding straw hats for wages or for sale. There is reason to believe this is an underestimate. As young girls and women working for their mothers or mothers-in-law, they did not know much about the transactions conducted by their elders in order to obtain cotton or sell cloth.

Luochuan village women thus participated in a home-based hand spinning and weaving tradition in the early twentieth century, despite the fact that their families did not grow their own cotton and had to import it from southern Shaanxi. Competition with factory cloth entered their region before the war, through markets and merchants, but heavy government demands for cloth for soldiers’ uniforms, shoes, and bedding slowed and even reversed the decline of these traditional hand skills until the 1950s.

Two conflicting trends therefore affected village spinning and weaving in Shaanbei. First, factory cloth imports and the new, town-based improved technologies of spinning, weaving, and finishing cloth undermined traditional home-based producers. Second, the greatly increased government demand for cloth during wartime blockades sparked a temporary revival of home-based methods (Keating, 1997). Luochuan experienced a rapid improvement in transport and textile technology at the same time that military needs for cloth outpaced the local supply. Early factory production lacked sufficient skilled workers and could not meet demand. Thus, at the same time that new technologies were introduced to increase output, government also needed rural women to increase their yarn and cloth output. However, the new transport
and textile technologies promoted during the Anti-Japanese and Civil wars eventually helped eliminate the home industries, just as they had earlier in Zhouzhi.

Luochuan Footbinding

In 2008, an 80-year-old woman told us that on the day she had her feet bound at age seven, her mother started to teach her to spin. She was no longer allowed out to play, and could only go in the courtyard. This was the local ideal; women and girls with bound feet did not leave the courtyard. In fact, when asked about farm work, a third of the women born before 1930 volunteered that before marriage they did not do farm work or go into the fields, compared to only 12 percent of the women born after 1930. One woman said explicitly that because she had bound feet, she did not do farm work. Yet others, as we shall see below, did participate in a variety of agricultural tasks that took them out to the fields or threshing grounds.

The 1944 Luochuan gazetteer mentioned that footbinding was declining and mainly continued to be practiced by women over twenty years of age (Yu, 1944: 504, column 11). These women would have been born and bound before the early 1930s. Our own information on village footbinding also shows that it was nearly universal for those born before 1924, corresponding to the period before the motor roads were built (see Figure 5). In our sample of 100 women, 98 percent of the mothers and 96 percent of the grandmothers had bound feet.26

Our data show that footbinding dropped off rapidly after 1936, roughly the time when Edgar Snow was driven through Luochuan. The decline started with those born in the late 1920s. New binding rapidly declined for those born in the early 1930s, with all but one woman born after 1935 never having their feet bound. The timing of this abrupt decline in new footbinding corresponds to the opening of motor roads connecting north to south from the new Longhai railway and exposing local markets to increased cloth imports (see Figure 5). Still, 1935 to 1949 was also a time of tremendous turmoil in the region of Luochuan, with Communist and Guomindang armies vying for control and increased demands for military supplies affecting the villagers’ everyday lives. The pressures on women both to unbind feet and to produce more yarn and cloth for the soldiers must have been intense in this region.

Figure 5 shows the estimated “decision time” for the parents’ choice to bind or not bind these women when they were girls. The shift toward non-binding appears quite abruptly for Luochuan in the 1930s, and footbinding essentially stopped by 1940. The same pattern is reported for older sisters of
Figure 5. Luochuan percentage footbound by expected year of binding (at age 7)

Note. Expected binding year in Luochuan is based on the average for all footbinding ages, 7.5 full years (zhou sui), calculated here by adding 7 to the birth year. At this age, most parents would be deciding whether to bind or not. A few women who reported older ages for the start of their footbinding said that they bound their feet themselves, often only for a short time, because they were getting married.


the women interviewed. One hundred percent of the older sisters of those born before 1930 had bound feet. For women born in the 1930s, 50 percent of their older sisters were not bound, and of those born in 1940 or later, all had older sisters whose feet were not bound, although two also had older sisters whose feet were temporarily bound.

Luochuan’s economic position was intermediate between Guanzhong to the south as a source of cotton and cloth production, and Yan’an to the north as an area short of cotton and cloth. A shift to cloth imports had begun, but the abandonment of hand spinning and weaving was temporarily slowed by the wartime blockades and urgent need for increased textile output. There is no evidence that the new hand spinning and weaving technologies introduced in the towns reached Luochuan village weavers, or that returns to spinning and
weaving were profitable for village women who worked at home, depending on uncertain cotton supplies imported from Guanzhong. In any case, the Luochuan gazetteer reported that annual production of homespun remained very low (Yu, 1944). The building of new textile factories and workshops, new roads, and wartime itself made the future of girls as homebound textile producers uncertain and coincided with a rapid decline of footbinding.

**Conclusion: Footbinding’s Link to Textile Work in Shaanxi**

This is the first study to document how common footbinding was among village women in Shaanxi, even in fairly remote villages. As in other provinces that have been studied, footbinding was not concentrated among the leisureed elites, but was widespread among rural women engaged in handwork in textiles. The rapid decline of footbinding in these two rural regions of central and northern Shaanxi is clear. What has been less clear is the underlying and profound transformation of the value and marketability of women’s handcraft work during the first half of the twentieth century, as well as the historically close relationship between rural women’s widespread and important domestic industry and footbinding. Women’s domestic labor created the cloth supplies that were used for clothing, bedding, shoes, sacks, and carrying bags. These and other handcrafted goods (straw hats, mats, baskets) were not only for domestic use; they also entered into spheres of exchange with local and long distance traders.

The rapidly changing conditions of women’s work and the decline of handcrafts in the face of the massive influx of industrial goods hauled by trains and trucks into hinterland provinces such as Shaanxi in the 1930s are apparent in our two counties. Women had significant responsibilities for household production of handmade thread, cloth, and clothing, cotton shoes, and straw hats both for home use and for exchange. The value of the cotton products changed dramatically because industrial thread and cloth could be produced on a large scale with much less labor and because these industrial products and improved technologies were now reaching the interior. More remote rural locations, such as Luochuan, which had formerly relied on human and animal carriers to bring in cotton for hand spinning and weaving, had high transport costs that made their goods uncompetitive on the market. Where formerly a huge labor force of women was needed to produce clothing in the villages, now factory-made textiles could be brought to them for almost the same price as raw cotton. It no longer paid to spin or weave.

Women did not instantly stop producing textiles at home because they did not have easy access to other labor markets. They were largely illiterate and
not very mobile. Neither their footbound bodies nor their culture and its moral conventions prepared them to forge ahead into new nondomestic work settings where working conditions cast doubts on their morality. Particularly if their households grew cotton, they continued producing some textiles for home use even after their products lost their commercial value. As textile work proved incapable of adding to family income, families had to question the conventions that confined girls and women to the courtyard economy and limited their participation in the more physically demanding agricultural tasks faced by all farming households. Despite the ideal of women’s work centered in the courtyard, most footbound women had always helped with a range of “light” seasonal tasks in agriculture.27

Figure 6 shows a gradual increase in the percentage of girls in our Zhouzhi and Luochuan samples who reported that they participated in agricultural work between age ten and fifteen. For Zhouzhi, this increase begins for those who were born in the 1925–1929 cohort and reached age ten in 1935–1939; for Luochuan, increased agricultural work begins for girls in the 1920–1924 birth cohort. Until the revolution forcibly brought village women into the nondomestic labor force in the 1950s, girls and women were in a precarious limbo, prepared for domestic handwork but increasingly seen as a burden and desperately needing to find new forms of employment. For teenage and adult women whose feet were permanently deformed by binding, the shift to more physical work in the fields would have made their disadvantage painfully obvious.

Our data bring together the transformations of gendered work and gendered feet under the pressures of rapid technological change in the Republican period. The evidence from rural Shaanxi elderly women and from secondary sources supports our argument that the demise of homebound handwork in textiles and the demise of footbinding were closely related. These findings parallel those from Yunnan where Bossen (2008) found that women in Lu village, with little textile production, stopped binding feet in the 1920s and 1930s and worked in the fields, while those in Liang village continued both home textile production and footbinding until the Great Leap Forward. Our research represents a sea change from the prevailing view of footbinding as beautification to recognition of its role in confining and training girls for sedentary labor. It also emphasizes the magnitude of the economic transformation upon rural women’s work and value in the early twentieth century. Study of the transformation of girls’ and women’s labor in rural Shaanxi thus contributes to our understanding of larger economic transformations occurring across China during the Republican period.

Some scholars argue that villagers stopped binding their daughters’ feet out of a desire to be “modern” and avoid the ridicule of Westerners or urban
elites (Ko, 2005: 67; Ko, 2001: 132–33). Others credit the anti-footbinding campaigns of religious reformers and the Nationalist government with helping to end the custom (Jackson, 1997: 154). Still others give the credit to Communist policies (Hong, 1997: 214–15). Without denying that these changes were in the air, we argue that rural families increasingly chose to stop footbinding their daughters in order to shift girls and women into different kinds of productive activities when household industries encountered the rising tide of industrial textile production. The abandonment of footbinding for young girls occurred rather rapidly in the 1930s. The father in Zhouzhi who had to carry his seven-year-old daughter out to the field to help pick cotton would have found it more efficient to have a daughter who could walk and help carry back the cotton herself. For adult rural women, it was difficult to find new forms of productive work as they had been trained for hand labor, and their feet, with bones often broken or permanently bent, limited their mobility. In households with little land, there would be limited ways that women could substitute for other family members. Having lost their ability to add value to the household through textile production, economically distressed rural women needed to make drastic changes for the sake of their households and their daughters’ economic prospects. Certainly ideas, fashion, government policy,
and wartime itself were relevant to the decision to cease footbinding. These forces are difficult to disentangle. However, the transformation of women's work in the textile economy demonstrated here, accompanied by rapid transportation and technology changes, was well-timed in terms of magnitude, penetration, and permanence to have motivated families to terminate footbinding and train girls for other livelihoods.

The connection between the demise of textile work and the demise of footbinding is controversial given that scholars have claimed for more than a century that footbinding was performed for aesthetic reasons to please men or to conform to fashion. Our claim here is not that footbinding originated as a form of labor control—evidence is simply not available to answer the question of origins with any certainty. We do argue that the prevalent emphasis on aesthetics has obscured the very real and important labor of rural women and girls in textile production and the bodily requirements and discipline through which the labor of girl children was sustained. The supervision of the binding and training of girls in spinning and weaving rested with the older women of her household. Household textile production and incomes depended on the combined work of the mothers and young daughters, and daughters-in-law. As the household textile economy was destroyed, women had little incentive to keep their daughters busy at the spinning wheel or loom if it did not help to support the family. They thus had little reason to continue footbinding, a change in behavior no doubt encouraged by social and political forces pushing in the same direction.

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Notes

1. In Taiwan, the Japanese colonial government effectively abolished footbinding in 1915 so that women could work in the fields (Brown, 2004: 265n45).
2. For an explanation of heavy and light work, see Gates, 1997a.
3. Lacking information for 1930s Zhouzhi county, we examined the gazetteer for neighboring Hu xian, where economic conditions are similar.
4. Shaanxi’s population in 1949 was only 13 million and 90 percent rural (Shaanxi sheng tongjiju, 1999: 249).
5. Chongxiu Zhouzhi xian zhi (1925a: 1) reported the population as 481,329 in 67,193 households (an average of seven members per household). The census year, unspecified, was probably in the early 1920s.
7. One dan is 50 kilograms, or 100 jin.
8. Xiong and Wang surveyed 116 households in four villages belonging to two administrative villages (xiang) (1942: 10).
9. In 1933, Xingping county produced more than 6,000 dan (300,000 kg) of raw cotton of which 10 percent was sold to Gansu province and 17 percent to the town of Weinan, 120 km to the east, while 73 percent (220,000 kg) was used for local weaving. Each jin (1/2 kg) of cotton could be woven into 2 zhang of cloth. Xingping weavers produced 6,000 rolls of cloth a year (each roll was 210 zhang long and worth 70 yuan). Much of the cloth was also sold to Gansu. In total, Xingping county received 43,000 yuan from selling cotton and 420,000 yuan from exporting the handwoven cloth (Longhai tielu guanliju, 1933: 416).
10. Zhouzhi as the county name refers both to the county seat and the subordinate villages outside the town in which the interviews were conducted.
11. This was probably factory-made cloth from eastern China. Handmade cloth (tubu) was also brought from other provinces. Certain regions that obtained early access to machine-spun thread and improved looms expanded their handloom weaving production for distant markets, creating competition with local Shaanxi handloom weavers (Grove, 2006).
12. The Longhai railway extends from eastern China’s Lianyungang city in Jiangsu through Zhengzhou and Xi’an to Lanzhou in western China (completed in 1952), passing through Jiangsu, Henan, Shaanxi, and Gansu provinces. The section between Luoyang and Kaifeng in Henan was completed by 1909. By 1926, the line between Dapu in Jiangsu and Lingbao in Henan was completed. Next, it reached Tongguan, Xi’an, Xianyang, and Baoji in Shaanxi, and finally Lanzhou (Longhai tielu guanliju, 1932; Huenemann, 1984: 251–57).
13. Our informants did not report working in this mill. Xi’an was too far away and at that time village women did not engage in outside migrant labor.
14. Vermeer does not indicate whether the Hubei women workers had bound feet or not.

15. In 1933, the Longhai Railway Bureau reported that with improved wooden spinning wheels one person could spin 6 to 32 threads whereas the traditional wheel could only spin one. The new wooden spinning wheels were very popular in Beijing and Tianjin (Longhai tielu guanliju, 1933: 445).

16. The outbreak of the war with Japan severely damaged the coastal textile industry and disrupted transport along the Longhai railroad. The cost of machine-woven cloth rose so sharply that the use of locally made cloth was revived in Guanzhong. “This new demand was met best by small-scale local textile factories (using simple iron looms) and by cottage handicraft producers. . . . In 1938 and 1939, and also later, Japanese bombardments destroyed part of the industrial installations in Xi’an” (Vermeer, 1988: 344). Government demand for military supplies led to the establishment in 1939 and 1940 of two textile factories in Wugong county, north of Zhouzhi, with raw material supplied by the Nationalist government. All production was turned over to the central Military Supply Department. One of these factories could produce 621 cotton uniforms (tao) per month (Wugong xian zhi difangzhi bianzuan weiyuanhui, 2001: 247).

17. She later stopped binding her feet because of the pain and also because of government opposition but could not recall which government or at which time this occurred (Interview ZZQ1-27).

18. See Luochuan difangzhi bianzuan weiyuanhui, 1994: 60. In 1950, the population of roughly 72,000 was classified as 98 percent rural.

19. The 1994 Luochuan gazetteer focuses on the period after 1949, with limited historical information.

20. Villagers reported that Luochuan was a “white” area, not under Communist control. See Esherick, 1988: 339–77; Selden, 1971; and Keating, 1997. Esherick’s map shows Luochuan surrounded on three sides (east, north, and west) by the Communist Border Region (p. 341). Selden included Luochuan as a “red” area, while Keating’s map shows it outside the Communist-controlled area, which only went as far south as Fuxian. Selden’s map (p. 102) included Luochuan as an area with “land redistribution partially completed” and among the 23 districts in the border region (p. 138n26). On August 27, 1937, the Communist Party Central Committee met in Fengjia village (near our Luochuan research sites) and passed a “Ten-Point Program for Resisting Japan and Saving the Country” (www.chinadaily.com.cn/english/doc/2005-05/08/content_440066.htm).

21. On sections of the Yellow, Wei, and Luo Rivers, there was limited river transport but only for shallow boats and rafts. Cotton and wheat flour were shipped downstream (Vermeer, 1988: 53). Kohler (1958: 4–5) observed that “beast of burden trails” ran north-south through the center of Shaanbei, and that the north-south
Yellow River canyon, despite its dangerous rapids, was also used for shipping in the 1930s.

22. With a capital value of 521,000 yuan, it had a twenty-four horse power “Model 33” spinning yarn machine, four “stone board” cloth weaving machines, and one wool weaving machine. The factory had an office, ten rooms, and three cave rooms (yaodong), as well as equipment for sizing and dying cloth. (Yu, 1944: 164)

23. The sample size varies from a maximum of 103 to slightly fewer depending on the question because some women grew tired and did not answer all questions.

24. Of the women whose natal families grew silkworms, none reported reeling silk. A few women reported raising silkworms before marriage, and only one after marriage. Presumably, they bought cocoons in local markets.

25. Many women initially denied weaving for sale or wages, but in longer conversations some revealed that they actually did weave for people outside the family. An 83-year-old woman interviewed in 2008 explained that before marriage she wove for “other people” on contract and was paid in money and in grain. As girls, they learned not only spinning and weaving, but also other kinds of hand labor such as raising silkworms and reeling silk, sewing clothes, making and embroidering cloth shoes, twining straw, making straw hats, twisting hemp rope, plaiting straw barrel covers, making complex paper-cuttings for window decorations, and making cloth toys. These items could be produced for home use or sold. Generally, fathers handled exchanges of thread or cloth for cotton or grain. Luochuan women did not go to markets themselves.

26. One woman reported that her mother did not have bound feet because she believed in Christianity (yesujiao).

27. These include planting, weeding, harvesting grains, husking and hanging corn to dry, picking cotton, winnowing, sweeping, spreading, and drying grain in differing proportions.

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Biographies

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