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Chapter Two: Trade, Markets, Production

In a song first published in 1804, the weaver poet James Orr (1935) described the ruination of a weaver and his family through indulgence in drink and other vices, and their salvation through conversion to Methodism. At the beginning of Orr's tale, Christy Blair is portrayed as a prosperous weaver, employing two journeymen, and relying on the labor of his wife and children to supply and prepare yarn for the loom:

He weav'd himsel', an keepet thwathree gaun,
Wha prais'd him ay for hale weel-handled yarn;
His thrifty wife an' wise wee lasses span,
While warps and queels employ'd anither bairn;

The household seems fairly self-sufficient, though as we will see, it is unlikely that the women and children in a single family could have spun enough yarn to keep three weavers at the loom full-time. In a later stanza we learn that the family also owned two milk cows that 'gaed baith for debt,' the first real casualties of Christy's drinking. When finally 'a was gaen he had to sell or pledge,' Christy wandered into a barn where a Methodist preacher was holding forth, and decided to 'join the flock.' As a result of his conversion, the household's prosperity recovers and multiplies:

They min't baith warls. In warps boil'd by their han'
Did thrice ten shuttles lose their entrails sma';
An' on a scoup o' cheap, but mountain lan',
They graz'd yell kye, an' drain'd, an lim'd the shaw.

Thus Christy's household has been transformed from what might be described as a "traditional" artisanal economy, to a "modern" capitalist one. Now the family puts out

yarn to thirty weavers in contrast to the two or three journeymen they had earlier employed, and raises beef cattle for sale in contrast to the two cows they once kept to provide milk for their own consumption. It is clear that most of the yarn put out by the family is purchased in the marketplace – ‘Beasts, yarn, an’ claith, aft call’d the sons awa’;’ - although they continue to prepare yarn for the loom at home.

Other aspects of this complex song will be explored in Chapter 5. The present chapter examines the different relations of production described by Orr, placing their evolution in the context of changes in the structure of trade and marketing. I argue that, while Conrad Gill’s (1925) classic account of the Irish linen industry relied too much on a linear model of capitalist development, more recent accounts have underestimated the significance of changing relations of production before the factory.

Trade. Irish Linen in the World-Economy, 1700-1850

Rural domestic production of linen cloth and yarn expanded rapidly in Ireland from the end of the seventeenth century in response to new trade regulations and growing demand from Great Britain and the American colonies. Linen was Ireland's single largest export to Britain during the eighteenth century - a time when Irish exports in general became increasingly dependent on the British market (Figure 2.1). Politically, Ireland remained an independent kingdom with its own parliament under British sovereignty until 1801, when the two kingdoms were unified under a single parliament at Westminster. After 1780 linen cloth exports increased dramatically, so that the period from 1780 to around 1825 may be considered the peak years of Irish linen production under the household system.

<Figure 2.1 about here>

Like cotton and the lighter woolens, linen was "decent cloth", an inexpensive lightweight material that "enhanced the living standards of the urban middle and lower classes, and soon displaced coarse homespuns in peasant households as well" (Schneider 1989, p. 6). Whereas wool and, after 1790 cotton, were the leading commodities exported from Britain, linen was the most significant manufactured *import* (Davis 1969; O'Hearn 2001, Chapter 3). Trade regulations favoring the Irish linen industry were thus intended to diminish Britain's dependence on imports from mainland Europe, and to offset potential competition with the British woolen industry (Harte 1973). In 1699 an Act of Parliament prohibited the export of woolen goods from Ireland. Irish linen, by contrast, had been allowed to enter Britain duty free since 1696, and in 1705 its direct shipment to British colonies was authorized (Cullen 1972, pp. 34, 37, 59).

<Table 2.1 about here>

Most Irish linens - on average more than 90% - continued to be shipped to Britain, where a further 20% were re-exported, mainly to the Americas. Table 2.1 shows the main destinations of linens shipped *directly* from Irish ports. Unfortunately, this underestimates the proportions of linens that ultimately made their way to markets outside Britain. Nash (1985, p.349) estimated that "from the mid-1760s to the mid 1790s, when Irish linen exports were growing at their fastest rate, the colonial market's share of total exports increased from 13 to 27 percent." According to his calculations, about 80 percent of Irish linen exports to the Americas went to the northern mainland, especially to Philadelphia and New York. Irish linens were shipped through English ports primarily because English merchant houses had greater capital and better access to shipping than their Irish

counterparts (Truxes 1988, p. 180). The value of linens shipped *directly* from Irish ports to America represented less than two percent of the total export trade throughout most of the 18th century, although this proportion increased to an average of almost 10% in the 1780s and 90s. The direct trade served mainly to reduce the cost of flaxseed from North America, by exchanging it for linens in a quasi-barter arrangement (Truxes 1988, p. 182).

The growth of indirect exports to the Americas was at least partly stimulated by a system of bounties introduced at mid-century. The purpose of the scheme was to help British and Irish linens compete more effectively with foreign linens, which benefited from a 'drawback' of British import duties when re-exported to British colonies. There was a substantial demand from the plantation colonies for the coarse German linens known as 'Osnaburghs,' which were used for clothing slaves. In 1743, a bounty of 1d a yard was allowed on exports valued at between 6d and 12d per yard. In 1745, an additional 1/2d per yard was allowed, and the scheme was extended to linen valued as low as 5d per yard, and up to 1s 6d (18d) per yard. The scheme thus favored the production and export of plain and coarse linens. In the second half of the 18th century, the official valuation of Irish linens ranged from 15d to 18d per yard.

There has been some disagreement on the extent of the bounty system's influence on the Irish linen industry. Gill (1925, p. 71) believed that it had little influence on the course of Irish trade. Following Murray (1903, p.127), he pointed out that because, up to 1780, the bounties were allowed only on linens exported from British ports, the cost of carriage to England absorbed at least half the benefit to Irish exporters. More recently, however, Truxes (1988, p. 177) stated that "the bounty was the single most important encouragement to Ireland's transatlantic linen trade."

Throughout most of the 18th century, Irish linens were sent first to the Linen Hall in Dublin, where they were purchased by factors on behalf of English merchant houses. By the 1780s, however, there were significant changes in the system of trade. First, Belfast overtook Dublin as the most important port in the linen trade. Second, the merchants who exported the cloth from Belfast were increasingly able to do so on their own account, thus by-passing the factors (Gill 1925, pp. 188-189). Many of these merchants were also bleachers, engaged in finishing the cloth prior to export. Finally, Liverpool began to replace London as the main port of destination for Irish linens, accounting for over 60% of the total by 1812 (Solar 1990, p. 64). Irish linen exports went through a prolonged depression in the late 1820s and early 1830s, followed by a strong recovery in the late 1830s and early 1840s (Solar 1990).

<Figure 2.2 about here>

Linen yarn exports followed a different trajectory from that of linen cloth. They increased steadily during most of the eighteenth century, growing quite substantially after 1750. From about 1780 onwards, however, when linen cloth exports were growing by an average of nearly 12% per annum, yarn exports began to decrease, declining to below their 1700's level by 1820 (see Gill 1925, p. 339). By this time most Irish yarn was traded internally - between spinning and weaving districts. The linen yarn exported to Britain had been used primarily in the manufacture of cheap fabrics made from a mixture of linen and cotton and, until the introduction of machine-spun cotton in the 1770's, as the warp in cotton cloth, because hand-spun cotton was too weak for this purpose. Mill-spun yarn began to displace hand-spun yarn in Irish linen industry in the 1830s. Nonetheless, Geary (1998, p. 523) showed that as late as 1839, hand-spinners supplied more than half the

yarn absorbed by the weaving sector. Yarn and cloth made its way from dispersed rural households to Britain and America through a system of marketing that persisted through the early years of industrialization.

Markets. Merchants, Drapers, Jobbers and Hawkers

As we have seen, Irish linen was exported by Dublin merchants who sold it through English factors. Much of the cloth was bought on commission for merchants in London, and this trend increased during the eighteenth century. Irish merchants, through lack of capital, were heavily dependent on English credit (Cullen 1968, pp. 96-98). At the local level the cloth was purchased by drapers - small-scale merchants who had the cloth bleached before carrying it to Dublin for sale. Even lower in the hierarchy of trade were the jobbers - petty-traders who bought yarn and cloth at local fairs in remoter parts of the countryside, and sold them again at the larger markets attended by drapers. Yarn-jobbers were also the crucial trading link between spinning and weaving districts.

The main sites of interaction between weaver and trader throughout most of the eighteenth century were the markets for 'brown,' unbleached linens. In 1776 Arthur Young observed the proceedings at the weekly market of Lurgan, Co. Armagh, where over 100,000 pounds worth of linen cloth was sold annually.

When the clock strikes eleven the drapers jump upon stone standings, and the weavers instantly flock about them with their pieces: the bargains are not struck at a word, but there is a little altercation, whether the price shall be one-halfpenny or a penny a yard more or less, which appeared to me useless. The draper's clerk stands by him,

and writes his master's name on the pieces he buys, with the price; and giving it back to the seller, he goes to the draper's quarters and waits his coming. At twelve it ends; then there is an hour for measuring the pieces, and paying the money; for nothing but ready money is taken.

(Young 1892, pp. 128-129).

Despite their tumultuous appearance, the brown linen markets were governed by a complex set of regulations and supervised by a number of paid officials. The body with overall responsibility for regulating and promoting the industry was the Linen Board, established by the Irish Parliament in 1711.¹ The Board consisted "...almost entirely of members of one or other of the Irish houses of parliament and (included) representatives of the great officers of state, the judiciary, the episcopacy and the landed gentry" (Gibbon 1976, p. 77). In addition to managing the funds allocated for promoting the industry, the Board and its officials performed the function of mediating between the various conflicting interests in the trade. Each link in the marketing chain would attempt to pass any losses associated with deficiencies in the cloth back to the preceding link - and ultimately to the producer - so that the Linen Board was inundated with demands for greater regulation of its sale. In 1763, for example, the Board received a petition from several "Merchants, Factors and Drapers of London"

(T)o lay before this Hon'ble Board the many Inconveniencies we suffer...by the Frauds and Impositions of some Manufacturers, in lapping their Linen with conceal'd Holes, Rents, fine Laps and other Frauds and Damages, beside sometimes being tender or unsound, and

frequently stamp'd a greater Length than they contain. (P.R.O.N.I.
D562/1577)

The signatories suggested that the Board purchase the deficient cloth and punish the "original proprietors".

From early in the 18th century, bleached, or 'white' linens were subject to inspection by 'lappers,' officials appointed by the linen board, who charged a fee for stamping, or sealing, the pieces fit for sale. Such regulation was intended to standardize the pieces by length and breadth according to type, and to guarantee the quality of Irish linens. In 1733, provision was made for the appointment of lappers to stamp brown linens, but the regulations surrounding the presentation for sale of unbleached pieces were not enforced by the Linen Board until 1764, when public sealmasters were appointed. This initiative occurred in the wake of drapers' efforts to enforce the regulations at a number of markets in the northeast, culminating in a confrontation between weavers and buyers at Lisburn in 1762 (McKernan 1997). In 1782, the system of sealing was brought under greater supervision with the appointment of county inspectors and inspector-generals with responsibility for monitoring the brown linen markets (Gill 1925, pp. 68-70, 108-113, 207-208).

Gibbon (1997, p. 83) has described the policies of the Linen Board as "a mixture of severity, consideration and compromise," while noting that, in the second half of the century, the Trustees "used the stick rather than the carrot" with respect to weavers. Specific regulations also existed for the production and making-up of saleable yarn, but the Linen Board adopted a comparatively indulgent stance towards spinners, and there was little official attempt to enforce the rules. During the first half of the 18th century, the

Board employed inspectors to ensure that yarn presented for sale was correctly reeled. From 1723, it was an offence to possess ‘unstatutable’ yarn. However, according to Gill (1925, pp. 39, 68, 78), neither spinners nor merchants observed the regulations, and in 1757 all the yarn inspectors were dismissed. Early in the 19th century the Linen Board received new complaints from factors about unstatutable yarn reaching Dublin from a number of counties in Connaught and Leinster. However, Peter Besnard, Inspector General for the southern provinces, attributed the problem to the poverty of spinners in remote districts, and in 1818 the Board established an annual fund for the purchase and distribution of reels in the southern provinces (Gibbon 1997, pp. 81-82).

<Table 2.2 about here>

Table 2.2 gives an indication of the value of linen cloth sales at the major linen markets in Ulster in 1783, 1803 and 1821. I have included only those markets where sales exceeded £30,000 per annum in at least one of those years. Following Crawford (1988, pp. 48-50), I have organized the markets by region, according to type of cloth sold. The most notable trend is the decline in value contributed by markets within the linen triangle,² the traditional heartland of fine yard-wide linens and cambrics, relative to the increase in value contributed by west Ulster, where narrower linens (“seven-eights”) suitable for shirting were manufactured, and relative to the spectacular rise of the market of Armagh, which specialized in coarse, yard-wide linens. The figures for Armagh are probably inflated, since it acted as a clearing-house for coarse linens, which had previously been sold at smaller markets and fairs throughout south Ulster (Corry 1817, p. 74).³ Despite concerns about the accuracy of the figures, they do show the extent to which the huge growth in output achieved after about 1780 depended first, on the

dispersal of weaving to the west and south of the core districts, and second, on increased demand for plain and coarse linens. Part of the overall trend may also be attributed to the introduction of cotton weaving to the northeast during this period. It may have attracted many linen weavers in the core districts because initially it provided relatively high earnings (Crawford 1994, p. 39; 1988, p. 48). Between 1803 and 1821, the rate of growth in linen sales slowed, and there was a trend towards re-centralization, as sales at many outlying markets declined.

By 1824 sales had temporarily recovered in the northeast, but this peak was followed by a long recession, and most commentators agree that outlying markets never returned to the prosperity of the 1780s and 1790s (Kennedy 1985), despite some evidence of increasing activity during the late 1830s and early 1840s (Collins 1982). By this period, the proportion of all linens exposed for sale at public markets had begun to decline. Strictly comparable figures are unfortunately not available for markets outside Ulster. However, estimates of the value of sales by county show that the most dramatic increase in linen output was achieved in Mayo, which had become the second most important linen county outside Ulster by 1816 (after County Louth).⁴ Map 2.1 shows the distribution of linen markets and annual volume of sales throughout Ireland in 1821.

<Map 2.1 about here>

During the long eighteenth century, there was little change in the *organization* of marketing in the Irish linen industry. Yarn and cloth produced in dispersed rural households made its way to British ports through a network of fairs and markets. While formal, “brown-linen” markets were established from the mid-eighteenth century, some linens and almost all yarn continued to be sold at customary fairs and markets for

livestock and provisions, where weavers and spinners set their pitch alongside other hawkers (Gill 1925, p. 53). Crawford (1988, p.39) concluded that “the structure of the brown-linen trade that had been endorsed by the 1764 act [governing the appointment of public sealmasters] operated so well that it continued to be accepted in principle by all parties, even if not enforced in detail, up until industrialization” – that is, until the introduction of mechanized spinning on a substantial scale in the 1830s.

Nonetheless, despite this continuity in the structure of marketing, the discussion above has identified some important changes in the Irish linen trade during the 1780s and 1790s. We have seen that there was an increase in the proportion of linens destined for the colonial market, together with an enormous increase in output during these decades. During the same period Belfast replaced Dublin as the main port of export, Liverpool replaced London as the main first port of destination, and Irish bleacher-merchants accumulated sufficient capital to bypass the factors employed by English merchant houses. Markets to the west and south of the original heartland of linen weaving accounted for an increased share of brown linen sales, while the coarse linen market of Armagh displaced the fine linen markets of Lisburn and Lurgan in pre-eminence. Meanwhile, exports of Irish yarn dwindled, as the demand from Irish weavers absorbed everything the spinners could produce, even as the demand from British cotton manufacturers dried up.

In England and Scotland, the last decades of the 18th century saw profound transformations in the organization of textile production, as mechanized spinning began to drive the development of both cotton and linen industries (Durie 1979; Harte 1973, p. 112).⁵ In Ireland, while Belfast had a “brief flirtation” with mechanized cotton spinning,

beginning in the 1780s, mechanization had little impact on the linen industry until the 1830s, when investment in mechanized flax spinning began to increase, and “capital and labor made a long run switch from cotton into linen” (Geary 1989, p. 267). The question of why the Irish market received the “wrong signal” – from the perspective of long-term development - to specialize in linen (Mokyr 1991, p. 189) will be pursued in Chapter 6. In the next section, however, I explore the extent to which changes in the linen trade at the end of the 18th century were accompanied by changes in the organization of production (as opposed to marketing), despite the absence of technological innovation in the main branches of the industry.

Production (1). From Rural Artisans to Rural Proletariat?

As well as governing the system of marketing yarns and linens, the Linen Board Trustees were charged with enforcing regulations concerning the manufacturing process. A weaver was supposed to have served a five-year apprenticeship, followed by two years as a journeyman, before he set up as an independent master. The Board did take action to enforce this legislation in County Down in 1722, but in general it seems to have been overlooked, and was repealed some time around the middle of the century (Gill 1925, pp. 64-65; Gribbon 1997, p. 85). From 1758 onwards, the Board sponsored a number of laws directed against weavers’ “combinations.” These laws indicate that, at least in some sectors of the industry, weavers were working for others, rather than on their own behalf (Gribbon 1997). In 1816, in a request for more pay, Robert Fowler, a County Inspector for Down mentioned that part of his time was spent “..settling disputes between Linen Manufacturers and their Weavers” (Corry 1817, p. 17). The extent to which linen

weaving was characterized by a process of “proletarianization,” whereby increasing numbers of weavers worked for putting-out manufacturers over the course of the 18th century, has been the subject of some controversy in the literature.

Nineteenth-century accounts often looked back to an "ideal type" of rural artisan household believed to have prevailed in an earlier era. In such households, all parts of the production process were performed, from cultivation of the flax to sale of the woven and finished cloth. In the early part of the eighteenth century, according to Stephenson, writing in 1808:

The farmers who had numerous families, committed the management of the land to one or two of their sons, and had weavers' shops erected, looms provided, and tradesmen engaged by the year, to teach the younger branches the art of weaving. The daughters spun flax; the good woman of the house, with the assistance of a girl, attended to the general affairs of the family, and bleached the cloth which was spun and woven by her daughters and sons...the land supplied the family with oats, potatoes, flax and milk, and the rent was paid by the industry of the manufacture. (Quoted in Green 1949, p. 53)

This romantic picture of an artisanal yeomanry may have approximated the Protestant Scots and English settler population of the northeast, amongst whom the export-oriented linen industry originated. However, it is unlikely that the self-contained household described by Stephenson could have remained the dominant form of manufacturing organization for long. Because of a technological bottleneck between spinning and weaving, at least four spinners were required to keep a full-time weaver supplied with

yarn. Thus, as the time devoted to weaving increased, most families would have been obliged to purchase some yarn in the marketplace.⁶ Moreover, the core linen weaving districts soon became densely populated, such that, according to Crawford (1982, p. 87), contemporaries noted their need to import flax, yarn and food as early as the 1730s. Finally, responsibility for the process of bleaching was transferred at an early date from the “good woman of the house” to specialist bleachers. According to Gill (1925, p. 50), the evidence suggests that “a fair number” of bleachworks had been established, and that bleaching had “passed beyond the reach of the ordinary weaver” by 1725.

Bleaching and finishing were the main stages of the production process in which significant technological innovations were adopted during the 18th century. In the 1740s mechanized systems were introduced for washing, rubbering and beetling the cloth (Crawford 1982, p. 90). After 1785, the use of chlorine greatly shortened the time necessary for bleaching (Green 1949, p. 69). Water power was also applied to the preparatory process of scutching flax, but according to Gill (1925, p. 264), much flax continued to be scutched by hand until the introduction of more efficient machinery in the early 19th century. Eighteenth-century innovations in the spinning and weaving phases were not widely adopted in the Irish linen industry. Two-handed spinning wheels were introduced to a number of European linen regions during the 18th century (Endrei and Maines 1995, pp. 37-38), but there is little evidence of their use in Ireland.⁷ Similarly, the flying shuttle, invented in 1733, was introduced only at the end of the 18th century, and did not become widely diffused until the 19th century (Crawford 1997, p. 41; McKernan 1995).

Outside east Ulster, at the beginning of the 18th century, linen weaving was carried on either by "bundle" weavers who supplied coarse narrow cloth to the peasantry, or by urban weavers who maintained traditional craft regulations. Linen weaving by private firms, who employed weavers in centers such as Drogheda, County Louth and Mostrim, County Longford, accounted for most of the growth in cloth production outside Ulster in the mid-eighteenth century (Cullen 1972, p. 61). Sometimes landlords attempted to establish such concerns on their estates.⁸ These efforts were clearly experimental, but "gentleman manufacturers" who exported their own cloth were also remarked on by Robert Stephenson in Sligo in 1762, while Besnard (1817, pp. 13, 15, 22) noted that production by "Factory Masters" was typical of the midland counties of King's (now Offaly), Longford and Westmeath, and of the northeastern county of Louth.

There is evidence, therefore, that whereas weaving for international markets took place in dispersed rural households in the northeastern countryside, in more southern counties it was relatively centralized. Cloth produced in this manner was sent directly to the Dublin Linen Hall and Cullen (1972, p. 62) argued that the extent of the weaving industry outside the northeast has been underestimated by considering only the amount of cloth sold at open markets. However, there is also evidence of a process of *de-centralization* in the southern counties during the second half of the 18th century. In 1762, Robert Stephenson welcomed the establishment of public markets "throughout the Kingdom," on the grounds that:

[T]hey will leave no Foundation for Combinations, and place every one concerned in the Manufacture, in a state of Independence of the other, and

extend the trade with as much success, as it now spreads in several Counties in Ulster (Stephenson 1762, p. 26).

In 1817, Peter Besnard echoed the theme in his remarks on the industry in County Longford:

The trade of this County is at present very considerable, and in a very thriving state, and most strongly illustrates the value of public Markets for the sale of Linens, shewing in the clearest manner, the decided preference that should be given to encourage Weavers to bring their own Webs to Market, rather than to follow the plan formerly adopted here, of establishing large Factories dependent on one person, whose death or ill success may be attended with the most fatal consequences (Besnard 1817, p. 15).

In the last two decades of the eighteenth century, growing numbers of rural households in north Connaught, especially in County Mayo began to weave coarse cloth on their own behalf for the export trade. As Cullen noted, the impetus for this development seems mainly to have come from within the rural population itself, but it was facilitated by the in-migration of several thousand Catholic weavers, fleeing from religious persecution in the northeast. In Mayo the spread of the weaving industry may have been partly due to the success of Lord Altamont's efforts to attract buyers to the Westport market (described by Young 1892, pp. 255-256), but as in the southern and western counties of Ulster, a continued increase in demand for plain cloth was undoubtedly the most important reason for the proliferation of weaving in north Connaught.

While there was a decline in the significance of centralized manufactures in the more southern counties, in Ulster there is some evidence of a trend in the opposite direction over the course of the 18th century. In his classic study, Gill (1925, pp. 138-162, 264-280) argued that, from the 1760s, drapers began to act as manufacturers, putting out yarn to a growing “weaving proletariat” which, he estimated, comprised more than 40% of all weavers by 1784, and two-thirds of the total by 1821. At that date, he argued, it was possible to distinguish three types of weaving district according to how fully “capitalism” had developed in each case. “Conservative” districts of “independent weavers” survived in “north Antrim, Tyrone, parts of Londonderry, and the outlying districts in general” (Gill 1925, p. 274). By contrast, the “bleaching districts” in the heartland of the industry - south Antrim, west Down, north Armagh and east Londonderry – were characterized by “employment on a large scale” by a class of manufacturers which included enterprising bleachers (Gill 1925, pp. 273-274). Finally, the district of south Armagh and north Monaghan was one of small employers (Gill 1925, pp. 274-275).

Gill’s analysis was driven by an implicit model of capitalist development as a linear process unfolding across a “correct” sequence of stages. Capitalism failed in the south because here, “leaders of enterprise were trying to take a short cut to the modern organization without the preliminary process of building up a market,” in contrast to Ulster, where a class of manufacturing employers appeared “as a normal and healthy development, due to increasing trade” (Gill 1925, p. 133). In recent years, however, Gill’s account has come under question. Crawford (1988, pp. 36-37) concluded that Gill scabbled about for evidence to support the unsustainable thesis that bleachers had become significant employers by the 1820s, and that even in relation to small

manufacturers Gill overstated his case. Both Crawford (1988, p. 42) and McKernan (1997) claimed that, in his interpretation of the Lisburn riot of 1762, Gill drew unwarranted inferences about the emergence of class tensions between journeyman weavers and manufacturers. McKernan (1997, p. 95) convincingly argued that Reddy's (1984) concept of "market culture" provides a better theoretical framework for understanding this event as part of "an ongoing dialogue between producers and buyers over the terms by which the market would be supplied and controlled."

Gill's mechanistic understanding of the development of capitalism led him to overstate his case with respect to class-differentiation in the weaving districts at the end of the 18th century. However, this should not blind us to the significance of "putting-out" manufacturers, especially in south Ulster, where, as we have seen, production at the lower end of the market had increased rapidly. An oft-quoted description of these entrepreneurs was given by Sir Charles Coote, in his account of Armagh:

Many of these farmers are master weavers, and are styled manufacturers; though they do not work at the loom they employ many weavers: their time is occupied at market chiefly in procuring yarn and disposing of their webs. Where a man of this description settles, and is so fortunate as to get a few acres, he soon establishes a manufacturing village around him, with those to which he gives employment. (1804, p. 138).

As Crawford (1988, p. 35) observed, such accounts "obscure many degrees of dependence, notably sons working for their fathers, or weavers taking yarn from jobbers either in hard times or until their own flax crop was harvested, scutched and spun."

Young (1892, p. 130) referred to *drapers* advancing the yarn at the fine linen market of

Waringstown, in County Down. However, relations of dependence between “master weavers” and “journeymen” were often superimposed on the traditional agrarian relationship between farmers and cottiers, especially in the western and southern weaving districts. Under the cottier system, a tenant farmer provided landless families with a cabin and small plot of land for cultivating potatoes (and sometimes flax), in exchange for labor on the farm. Grazing and turf-cutting rights were also sometimes included (Connolly 1998, p. 119). Entrepreneurial farmers adapted this system to the linen industry by substituting labor at the loom for labor in the fields.⁹

Instead of forming part of an inexorable process of class-differentiation, many of these arrangements proved temporary. Landlords believed that farmer-manufacturers were reaping profits from the land that rightfully belonged to them. In consequence, cottiers in the vicinity of the major linen markets were often able to outbid their former employers for tenancy on their small plots when leases came up for renewal (Crawford 1976, p. 197; 1983, p. 63). As more remote markets stagnated or declined in the first half of the 19th century, many manufacturers must have reverted to full-time farming. Nonetheless, a recognizable class of manufacturers was well established in Counties Antrim, Armagh and Down by 1825, when it was reported to a Parliamentary Commission that up to 386 of them held brown linen seals. Despite employing relatively small numbers of weavers (from 5 to 20), they were described as being of “as much worldly substance, as many to whom they sell their linens” (Crawford 1988, pp. 44-45). These manufacturers remained a distinctive feature of the Irish linen industry, even after mill spinning had begun to obtain a foothold. According to a report dating from 1846:

Among the Irish [mill] spinners, there are some who have cloth woven and even bleached on their own account, depending on the state of the market; these spinners are the most important. [...] Nevertheless, the larger share of yarn is sold by the spinners to manufacturers who give it out to weavers to be worked up at an agreed price. Among the manufacturers who buy yarn and give it out to be woven on their own account, there are some who sell it unfinished to the bleachers, and others who have it bleached for their own account and then ship it. The first sort is the most common; the bleachers in Ireland are at the same time, for the most part, first-class merchants; they have well established connections in all world markets, and it is for them and on their account that the greater share of exports are sent (Solar 1988, p. 20).¹⁰

Thus the characteristic relationships between weaver, manufacturer and bleacher-merchant that had emerged in the late 18th century were not *transformed* by the mechanization of spinning, although they were concentrated within a smaller geographical area.

The system of manufacturing linen cloth that emerged during the late 18th century provided a flexible organizational environment for the introduction of mill-spun yarn to the weaving districts during the first half of the 19th century. According to Boyle (1997), manufacturers were at the core of organizational networks linking mill-spinners to weavers in the Ulster linen industry during the first two decades of the industrialization process. With the introduction of power loom weaving from about 1850 onwards, the

manufacturers' role became obsolete, and the industry entered a phase of vertical integration.

Production (2). Gender and the Spinning Sector

While the focus in the literature has been on class differentiation amongst weaving households, the gender division of labor between spinning and weaving households was of far greater consequence for the proto-industrial expansion and capitalist transformation of the linen industry. This relationship was slowly eliminated by the introduction of machine-spinning, with devastating consequences for the great majority of rural industrial households, which depended on the manufacture of yarn, rather than cloth, for their survival.

Because of the bottleneck between spinning and weaving, the rapid growth in output of linens from the middle of the 18th century depended on the continued incorporation of new spinning households to the industry. It also depended on an increase in the area of land under flax. Unfortunately, we do not have statistics from Ireland's yarn markets comparable to those from the brown linen markets. However, in 1796, the Linen Board implemented an extraordinary scheme to promote flax cultivation by providing a spinning wheel in exchange for each rood (quarter-acre) of flaxseed sown.

<Map 2.2 about here>

Map 2.2 shows the distribution of wheels claimed by county, normalized by number of households in 1791. It indicates that, at the end of the 18th century, the most important yarn counties were in northwest Ulster, followed by south Ulster, north Leinster, and north Connaught. The 1796 data also confirm that flax was cultivated in tiny quantities by

numerous smallholders, and that the processes of flax cultivation and spinning tended to occur within the same households. During the era of proto-industrialization, the absence of commercial flax cultivation, and of putting-out systems in spinning, remained a distinctive feature of the Irish linen industry.¹¹

In the "yarn counties" the income derived from spinning in the households of smallholders was often crucial to their survival, and especially to the payment of rents (Collins 1979, p. 111). According to the Reverend William Henry, writing in 1739:

The chief riches of this county (Donegal) arise from the advanced progress they have made in the linen manufacture. The farmer generally contents himself with no more land than is necessary to feed his family; which he diligently tills; and depends on the industry of his wife and daughters to pay by their spinning, the rent, and save up riches. (Quoted in Almquist 1977, pp. 30-31).

Similarly, in County Mayo in 1776, Young (1892, p. 256) observed that "In their domestic economy, they reckon that the men feed the family with their labor in the field, and the women pay the rent by spinning."

Thus the Irish linen industry was characterized by a functional and regional division of labor between two forms of proto-industrial household, with different gendered relations to the marketplace. In the weaving districts men's labor provided most of the monetary income, and many households depended on the market for at least some of their provisions and raw materials. In such households, women's labor in spinning comprised an unremunerated input to the end product which was sold in the marketplace, in addition to their contribution to the reproduction of the household through childcare,

“housework,” and labor in the fields. When weavers depended on outputters for their supply of yarn, women’s labor in spinning may have been less essential to the household economy. Coote (1804, p. 253) reported that, in County Armagh, “Their earnings are generally spent on finery, as the men’s labor procures them provisions.” By contrast, in the spinning districts, women’s labor was the main source of monetary income, and most household activities – including the cultivation of flax for spinning – remained largely outside the market.¹²

Given the bottleneck between spinning and weaving, and the absence of a functional division of labor between flax cultivation and spinning, the continued growth of the Irish linen industry depended on an exponential increase in the numbers of households within the second category described above. There were two ways in which this growth could occur: first, through the incorporation of new districts where the majority of households were poor and subsistence-oriented, and second, through an increase in the population of such households within already incorporated districts. In the next chapter, I examine some of the evidence that both processes occurred in Ireland, through a dialogue with the theories of proto-industrialization.

Conclusion

In “The Penitent,” James Orr described two different kinds of weaving household. The first might be described as “artisanal” – oriented primarily towards self-sufficiency and maintaining a customary standard of living. The second might be considered “proto-capitalist” – oriented towards the market and accumulating wealth. Written in the climate of disenchantment surrounding the failure of the 1798 rebellion, Orr’s poem expresses the

hope that progress might be achieved through changing lifestyles rather than political transformation. I have discussed this aspect of his work in more detail elsewhere (Gray 1993c). For present purposes, it is important to note that while Orr, like Conrad Gill, represented progress in the form of a linear dichotomy, the reality of social change during the long eighteenth century was far more complex and uneven. Nonetheless, it is important to recognize that significant changes did occur in the Irish linen industry during the pre-factory era. With the growth of the Atlantic economy, demand for plain and coarse linens increased in Britain and America. In this context, the dynamic core of the Irish linen industry shifted to Armagh and its hinterland, away from the fine weaving districts around Lisburn. Ulster's bleachers wrested control of the overseas trade from Dublin merchants, and manufacturers gained a foothold amongst the weaving households that supplied the brown linen markets.

These changes occurred without any fundamental alteration to the structure of marketing that channeled linens from the countryside to centers of finishing and trade. This resulted in a flexible organizational system that facilitated the introduction of mill spinning. However, this "modernization" of the weaving districts during the long eighteenth century depended on the continued incorporation of exponential numbers of relatively poor and "traditional" households in the spinning districts.

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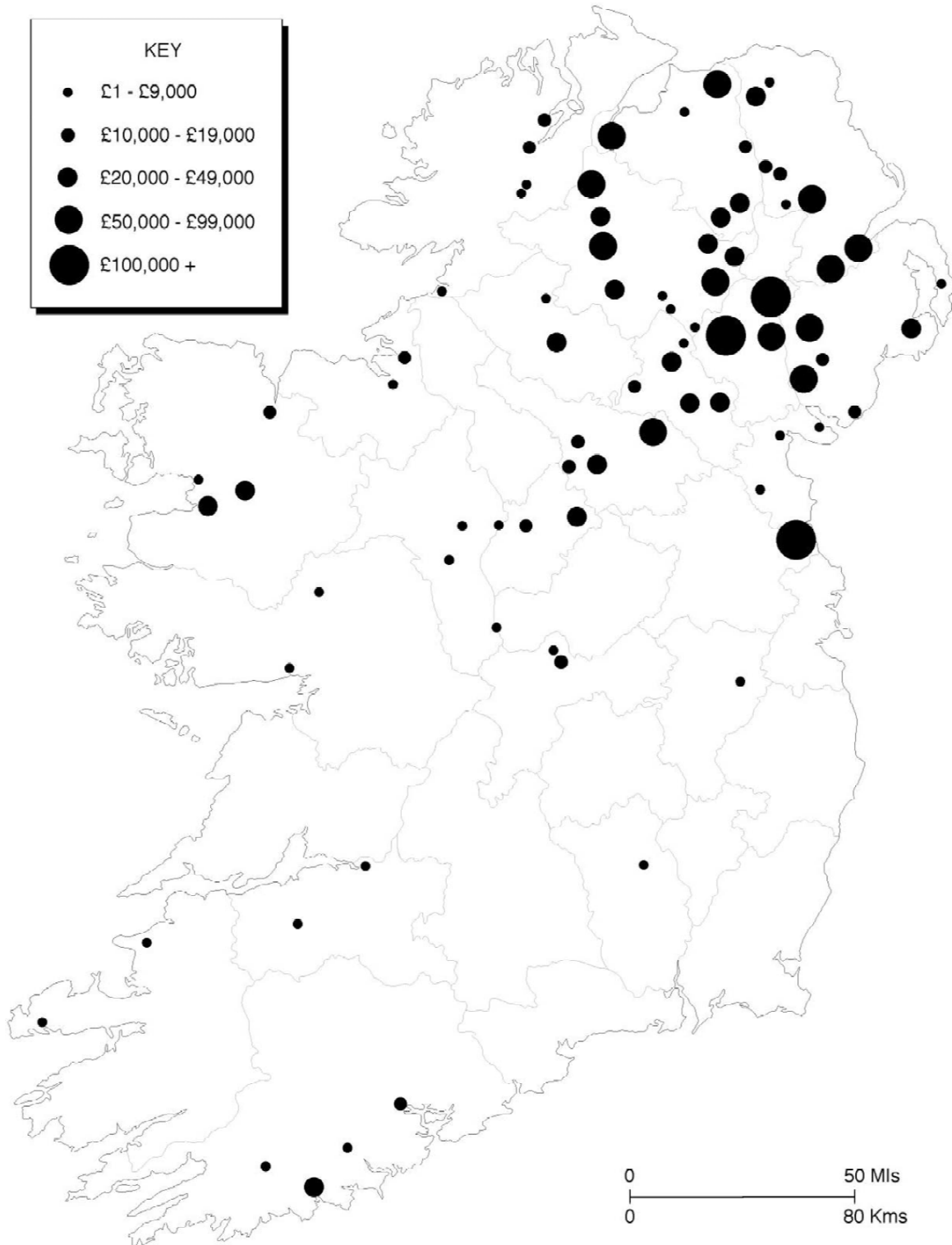
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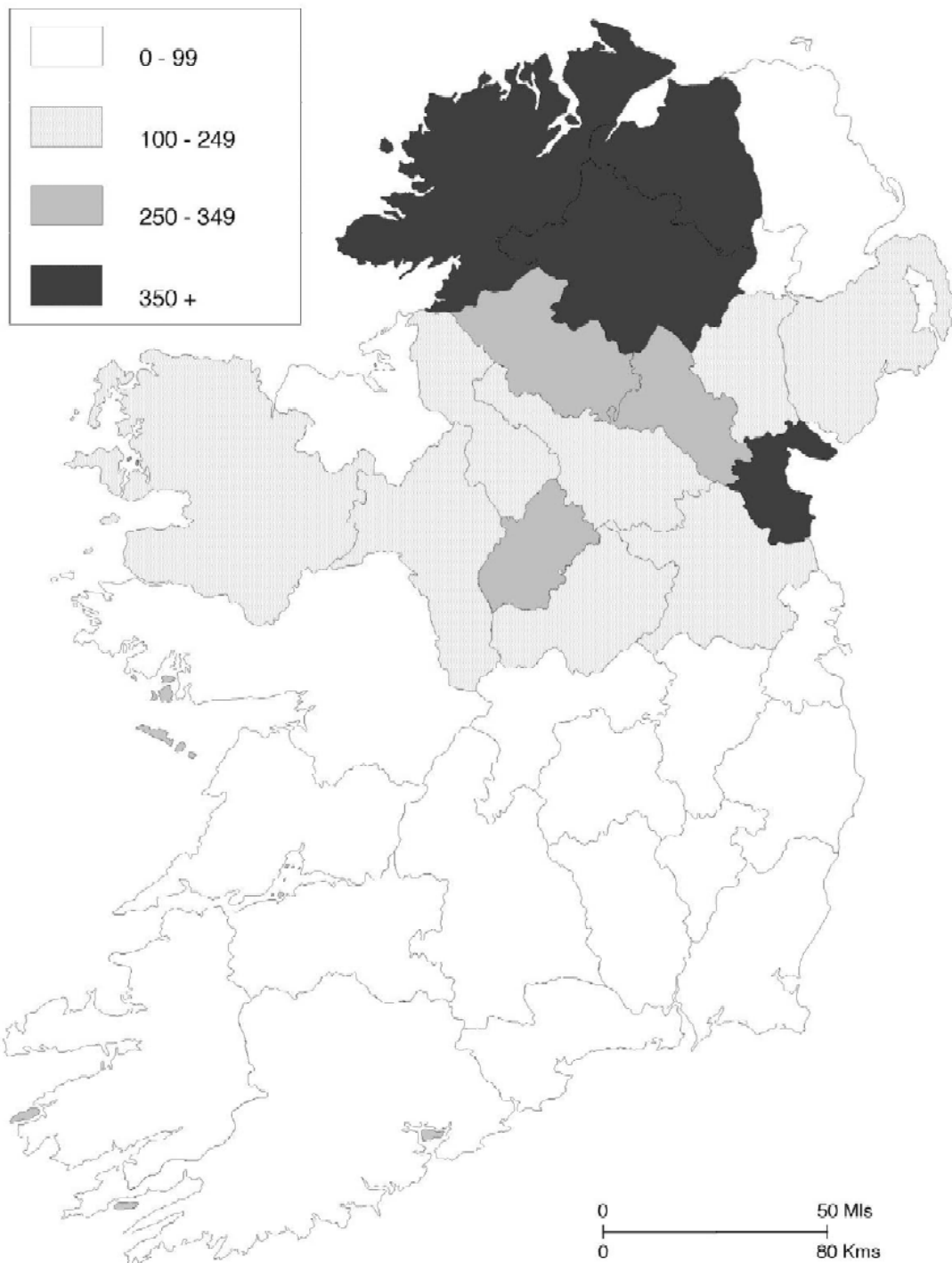
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Source: H.C. 1825, Vol. 5. Report from the Select Committee on the Linen Trade of Ireland, Appendix

Map 2.1. Value of Sales at Irish Linen Markets, 1821



Source: P.R.O.N.I. D562/5577. *An Account of the Number of Wheels Claimed in the Year 1796*; Dickson, O'Grada & Daultrey, 1982

Map 2.2. Spinning Wheels Claimed per Thousand Households in Each County, 1796

NOTES TO CHAPTER TWO

1. More properly, the “Trustees of the Linen and Hempen Manufacturers of Ireland.”

2. Crawford (1988, pp. 48-49) defines the linen triangle as the area between Belfast, Dungannon and Newry, “where the finest yard-wide linens were produced.” However, he describes Dungannon as “the greatest market” of the western district specializing in “seven-eights” linen, which suggests that most of the linens sold in that market originated outside the linen triangle.

3. See also the comments by Corry in the Linen Trade Report of 1825 (H.C. 1825, Vol. V., p. 851): “In some cases it occurs that linens sold in one market are carried from thence by the purchasers, and sold in another, and are entered in both...In other cases the public Sealmasters, who derive an income from the linens measured and stamped by themselves, but none other, confine their Returns to these linens only, and exclude all those that are brought to their markets with another’s stamp on them; besides, there is reason to apprehend, that in some instances those Sealmasters...will understate the quantity sold, in order to understate the value of their own situations, and thus it happens, that the General Return, in some instances, makes the quantity *too much*, in others *too little* [emphasis in original].”

4. See the estimates provided by Stephenson (1784) for 1770 and Besnard for 1816.

5. But see Berg (1994, p. 229), who argues that even in the linen and cotton sectors, “the break with older forms of work organization was not really so marked. As in the other textile manufactures, industrialization brought the intensification of a number of pre-existing forms of work.”

6. Collins (1982, pp. 133-134) has pointed out that linen-manufacturing households also adopted strategies to increase the supply of female labor – by taking in relatives and employing itinerant spinners.

7. In the 1820s, a survey conducted by the North-West Society of Ireland in County Tyrone included a question on the diffusion of the two-handed spinning wheel. The responses were almost universally negative, except from the parish of Leckpatrick, where it was reported that: “The double wheel has made its way here: two or three of our most respectable farmers’ daughters have got them, but there does not appear a general wish to adopt them or a conviction of their being better than the common wheel” (Day and McWilliams 1990, Vol. 5, p. 126).

8. See Arthur Young’s (1892, pp. 225-226) account of the establishment in 1774 of such a “manufactory” in Ballymote, County Sligo, under the auspices of Lord Lucan.

9. Young (1892, p. 165) may have witnessed such an arrangement at Limavady, in County Derry: “Farms rise so high as 60 to 70 acres, and a few to 200, in general about 40 acres; many weavers’ patches at 3 or 4; but the farmers themselves have yarn spun in their houses, which they give to the weavers to make into cloth: the farmer himself attending to nothing but the management of his land.” See Sir Charles Coote’s *Statistical Account of Cavan* (1802, pp. 218-219) for a vivid description of the cottier weaver system in that county. His account suggests that cottiers could be employed to weave under both daily wage and piece-rate arrangements.

10. From Solar’s translation of a pamphlet by Auguste Moxhet, published in 1849 and based on a letter to the Belgian Minister of Foreign Affairs. See Solar (1988), pp. 16 and 24.

11. See Chapter 6 for a thorough discussion of the implications of this feature of the Irish case, in comparison to those of Flanders and Scotland.

12. It should be noted, however, that Irish cultivators rarely saved flaxseed, so this did have to be purchased in the marketplace. In order to produce reasonably fine yarn, the flax stalk must be pulled before the seed is ripened. In order to save seed Irish producers would have had to set some of the stalks aside to dry before processing them for spinning coarse yarn. Gill (1925, p. 34) reckoned that, for Irish producers “It was doubtless cheaper to buy seed and produce flax at home than to save seed and buy a corresponding amount of imported flax.” See also the discussion in Hood (2003) and Barker’s (1917) fascinating account of why ‘frontier’ agricultural conditions provided a more favorable environment for the production of flaxseed.