Continuity and Change in a Seventeenth-century Scottish Farming Community

By I D WHYTE and K A WHYTE

In the past few years there have been significant advances in our knowledge of Scottish agriculture and rural society during the sixteenth, seventeenth and eighteenth centuries. Recent research has added to our understanding of the development and functioning of rural settlement and field systems and has demonstrated the existence of evolutionary changes in what had previously been considered a stagnant, even declining, rural economy. Nevertheless, one central figure still remains shadowy and insubstantial: the tenant farmer. Tenants were not the most numerous group in the Scottish countryside; in many Lowland parishes they were substantially outnumbered by cottars and farm servants. However, tenants were arguably the most important group, as the others depended on them for employment and were affected by their prosperity or poverty. The fortunes of the tenantry were equally important to the landowners whose incomes were mainly derived from the rents which they paid. It is surprising, therefore, that although the condition of tenant farmers in Lowland Scotland is central to an understanding of the roles of continuity and change in Scottish agriculture at this period they have received little attention. Impressions of their reactions to economic changes have been formed from the biased writings of eighteenth-century improvers who consistently described them as ignorant, reactionary, and unwilling to innovate. Equally, their position within rural society has been viewed within a model of a stagnant, impoverished economy, and they have been portrayed as a comparatively poor and homogeneous group. Some writers have depicted them as uniformly squalid and hardly distinguishable in wealth or status from their cottars. Their poverty has been attributed to insecurity of tenure caused by the prevalence of short leases and tenancies at will. Insecurity is thought to have caused poverty by encouraging low standards of husbandry as tenants were reluctant to invest labour or capital in improving their holdings if they were likely to be evicted without compensation at the end of a short lease or have their rents raised. Implicit has been the suggestion that short leases caused high rates of turnover with little or no continuity for long periods of occupation of farms by the same family. The poverty of tenant farmers is considered to have rendered them vulnerable to the effects of short-term subsistence crises which continued to affect Lowland Scotland into the early eighteenth century.

This paper aims to show that existing theories regarding Scottish tenant farming at this period are over-simplified and require some modification. The basis of the study is the particularly well-documented estates of the Earls of Panmure in the Forfarshire lowlands between Dundee and Arbroath.

2 Traditional views regarding agrarian change in early-modern Scotland are summarized in Whyte, op cit, pp 1-5.
5 J E Handley, Scottish farming in the eighteenth century, Edinburgh, 1953, p 120.
A series of annual rentals and accounts for the estates from the later seventeenth and early eighteenth centuries provides a framework into which data from other sources can be fitted. The background of rents, farm structure and holding sizes, and leasing policies within which the Panmure tenants operated is first outlined. This is followed by an analysis of continuity of tenure and the role of geographical and socio-economic mobility within the tenantry. The vulnerability of tenants to short-term economic fluctuations and the implications of this for agriculture and rural society as a whole are then considered.

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**Rents**

A measure of the overall stability of conditions at Panmure is the stagnation of rents between the early seventeenth and early eighteenth centuries. On the South Mains of Panmure, for example, rents remained unchanged between the 1630s and 1714. Some small-scale adjustments of rents did occur but there was no move to raise rents generally. As rack renting is known to have occurred elsewhere, this has the appearance of a deliberate policy carried out under successive Earls of Panmure and must, in itself, have conferred a measure of stability and security on tenant society.

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6 Scottish Record Office, Dalhousie muniments. Series of rentals commencing GD 45 18 1 (Carmyllie, Donnie, Innerpeffer and Panmure baronies) and GD 45 18 1031 (Kelly barony).

7 Whyte, *op. cit.*, p 252.
Nor did the structure of rents alter materially. As was normal throughout the arable areas of the eastern Lowlands rents were paid mainly in kind. The principal rents of most tenants consisted of grain: some wheat from the most favourably located farms, but generally bens and oatmeal. In addition kain rents, small payments in kind including poultry and coarse linen cloth, were required, as well as labour services such as harvest work on those main farms which the Earls of Panmure kept in their own hands. Only in Carmyllie barony were money rents normal. Dodgshon has contrasted the early appearance of money rents in the pastoral upland areas of Lowland Scotland with the persistence of rents in kind in arable areas. Nonetheless, Carmyllie tenants were as strongly orientated towards arable farming as their grain-paying neighbours in other baronies. Carmyllie was a comparatively late-settled area among the low hills at the eastern end of the Sidlaws and rents had probably been set in money from the start. A few farms in grain-paying baronies like Panmure paid money rents, and these, too, have the appearance of lands taken in from the waste at a comparatively late date. There was no significant trend towards commutation of rents in kind to money during the seventeenth or early eighteenth centuries and, as will be discussed below, this had important implications for the conditions under which tenant farmers operated.

Farm structure and holding sizes
Something of the socio-economic contrasts within the Panmure tenantry can be appreciated by considering farm structure and holding sizes. The traditional model of pre-improvement farm structure in Lowland Scotland has been the joint or multiple-tenant farm on which four or more tenants worked small holdings and pooled labour and equipment to furnish a common ploughteam. At Panmure, however, 67 per cent of all farms were in single tenancy and only 29 per cent in multiple tenancy, many of the latter being divided into only two or three substantial holdings. The remaining 4 per cent comprised clusters of pendants or small holdings on which most tenants leased only two or three acres.

It is hard to be precise about holding sizes as these were given only for small holdings. The best way of measuring the sizes of holdings is to examine the rents which they paid and relate these to the amount of land cultivated where a commissary court testament for the tenant of a particular holding survives. The relationship between rent and the amount of land in cultivation will have varied with land quality and the proportion of infield to outfield between farms. Nonetheless, where data are available, the strength of the correlation coefficient between rent paid and the amount of land cultivated (+ 0.69, significant at the 0.01 level) suggests that such differences were not of major significance. Table 1 shows that a considerable range of rents and holding sizes existed and that the tenantry were far from homogeneous. There must have been major contrasts in capital resources and status between the tenants of larger and smaller holdings. Many smallholders were part-time artisans and servants for this group show that there was no real distinction in wealth between them and the cottars. On the other hand, at least a third of the tenancies were large enough to have required a full ploughteam, traditionally of eight oxen, while the largest holdings needed two ploughteams and a substantial labour force.

Farm structures and holding sizes, like rents, remained unchanged throughout the period under study. There was some flexibility regarding whether certain farms

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were leased as single units or divided, probably depending on the availability of suitable tenants, but there was no long-term movement towards the farm amalgamation, holding enlargement, and reduction in the number of tenancies which occurred on some other Lowland estates.  

**TABLE I**

Range of Rents and Holding Sizes on the Panmure Estates

<table>
<thead>
<tr>
<th>Rent</th>
<th>Approx. Acreage</th>
<th>% of all Holdings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rolls of Grain (l. Scots)</td>
<td>Under Cultivation (Scots acres)</td>
<td></td>
</tr>
<tr>
<td>1-5</td>
<td>5-20</td>
<td>0.5-4</td>
</tr>
<tr>
<td>6-10</td>
<td>21-40</td>
<td>5-8</td>
</tr>
<tr>
<td>11-20</td>
<td>41-75</td>
<td>9-16</td>
</tr>
<tr>
<td>21-40</td>
<td>75-100</td>
<td>17-36</td>
</tr>
<tr>
<td>41-60</td>
<td>101-200</td>
<td>36-48</td>
</tr>
<tr>
<td>61-100</td>
<td>200+</td>
<td>49-75</td>
</tr>
<tr>
<td>100+</td>
<td></td>
<td>76+</td>
</tr>
</tbody>
</table>

Continuity of tenure

The series of annual rentals allows the length of time during which tenants occupied particular holdings to be calculated (Table 2). Considerable variation occurred: 9 per cent of tenants held land for only a single year and 37 per cent for five years or less, while 39 per cent held land for over ten, and 18 per cent for more than twenty years. This indicates that elements of mobility and continuity existed within the tenantry, and the pattern is strikingly similar to those identified by Williams for the Devon community of Ashworthy and by Nalson for an area in the Pennines, both in recent times, and, apparently, under more secure conditions of tenure.  

A breakdown of length of occupation by holding size showed no significant tendency for particular sizes of holding to change hand more or less rapidly than the rest. Other studies have suggested that higher-lying, more marginal farms experienced faster rates of turnover, but at Panmure there was no significant statistical relationship between the turnover of holdings and either altitude or land capability class. This probably reflects the generally favourable environmental conditions for arable farming in this area with even the higher farms in Carmyllie not being marginal for the cultivation of oats or here. It could also, however, have been influenced by the estate’s policy towards rent arrears, as will be discussed below.

One group of short-stay tenants which can be isolated were women. Most were widows who leased their husbands’ holdings temporarily until a new tenant could be found or a son was old enough to take over. Their mean period of tenancy was 6.3 years against 12.6 years for all tenants, though instances did occur of widows managing large holdings for extended periods.

To what extent did the estate’s leasing policy influence continuity of tenure? Surviving leases or tacks14 show that short leases for five years or less predominated until the late 1660s. There is then a gap in the sequence, and when the run re-commences in 1701 leases of eleven, fifteen and nineteen years had become normal. During the earlier period the renewal of short leases was often

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15 Scottish R O, Dalhousie muniments, series of leases from GD 45 18 145.
However, farmers' tenancy mobility underestimates geographical mobility. Kelly had the highest proportion of geographically mobile tenants, with 27 per cent moving internally or to and from other baronies. Kelly was located on the coast and was bordered by other Panmure baronies on a substantial part of its landward perimeter. Given the limited distances over which migration to new farms occurred (see below), it is probable that this figure does not greatly underestimate the total movement of tenants and that overall about a third of the Panmure tenants made a migratory move of this kind during the period under consideration.

With the farm structures which existed, many tenants were able to alter the amount of land which they worked without moving to other farms. One option was multiple leasing, where a man leased all or part of a neighbouring, separately-named farm in addition to the land which he already held. On multiple-tenant farms a tenant could increase his share of the farm. Equally, a reduction of holding size could be effected by relinquishing land held on an adjoining farm or reducing the share of a multiple-tenant farm. Such non-migratory means of changing holding size formed an important proportion of known alterations in tenants' operations. Multiple leasing accounted for 39 per cent of changes against 33 per cent for migration and 28 per cent for increasing or decreasing the share of a multiple-tenant farm. The balance between migratory and non-migratory options varied with the farm structures and range of holding sizes within particular baronies. In Kelly a high proportion of the farms were single-tenant ones, and here multiple leasing accounted for 62 per cent of all changes. In Downie, where many single-tenant farms were very large, there was less scope for multiple leasing or engrossing and migratory moves made up 58 per cent of changes in holding size.

The importance of changes in holding size which did not involve migration by the tenant may indicate a desire to minimize risk. Multiple leasing and engrossing involved...

Tenant mobility
The rentals also allow tenant mobility within the estate to be studied. Between 1660 and 1710, out of nearly 700 tenants in the five baronies, only 16 per cent can be identified moving from one farm to another. This figure underestimates geographical mobility as it does not include Panmure tenants who moved to other estates or farmers who migrated into the estate. However, figures for individual baronies allow us to come closer to real levels of mobility.
expansion from a base of land whose qualities were known and working with familiar neighbours. A move to another farm might increase the risk of failure by requiring the tenant to work land whose qualities had not been assessed personally as well as co-operating with comparative strangers.

When tenants did move to other farms the distances involved were short. Seventy-six per cent of all moves were under 5 km, 54 per cent under 3 km, and 70 per cent of moves occurred within baronies rather than between them. The restricted horizons of mobility are also shown by surviving leases which give the origins of incoming tenants. Only 14 per cent of the leases were granted to farmers from outside the estate and 69 per cent of these ‘outsiders’ came from farms on estates within the same parish as the Panmure farm to which they were moving. In such instances the parish minister would have been able to vouch for the character of the tenant, who would probably also have been known to the Panmure factor responsible for allocating tenancies. Most Panmure tenants seem to have originated within the estate, whether from existing tenant families or other groups, while most incomers came from within a narrow radius.

The rentals provide an overview of geographical mobility among the tenants but more detail can be obtained by comparing them with data from other sources. For Downie barony the origins of tenants can be explored using the register of Monikie parish, in which the barony was located, which is virtually complete from the early seventeenth century, listing baptisms, the calling of banns, and marriages though, unfortunately, not burials. If tenants who entered holdings in Downie between 1670 and 1714 are examined it is possible to check whether they had been baptized in the parish and to compare the origins of larger tenants and smallholders with a sample of cottars.

Only 28 per cent of tenants leasing holdings after 1670 could be traced in the baptism register. However, 40 per cent of tenants taking on holdings paying over twenty bolls of grain had been baptized in Monikie against only 21 per cent of smallholders paying five bolls or less and 20 per cent of cottars. Of the tenants leasing these larger holdings who had been baptized in the parish 82 per cent had fathers who had been Panmure tenants, though not necessarily on the same farms. Forty-six per cent of the men who followed their fathers as Panmure tenants in Downie barony did so on different farms. Only 14 per cent of smallholders were the sons of Panmure tenants. This suggests that when holdings were leased to men from within the estate the larger ones usually went to men with tenant origins, while smallholdings were more frequently occupied by men from non-tenant backgrounds.

So 60 per cent of the men taking on substantial holdings in Downie had not been baptized in the parish. The entries in the parish register indicate that some of them were already married when they moved into the parish and may have been established farmers from neighbouring parishes. In cases where a tenant had no baptism record but his father had been a Panmure tenant then a move of this kind had probably occurred a generation earlier. Many of the incomers were probably tenants from other Panmure baronies but it is impossible to demonstrate this as the registers of the appropriate parishes are deficient.

Socio-economic mobility
It has already been shown that the patterns of farm structure and holdings on the estate provided a range of holding sizes from pendicles to ones with 8o or more acres under crop in any year. Within this framework, how much socio-economic mobility occurred within the tenantry in terms of movement to larger or smaller holdings? This can be answered by examining the
change in holding sizes shown in the rentals. If holdings are divided into the seven size categories shown in Table 1 then 56 per cent of all increases in holding sizes did not involve a tenant moving into a higher size category and are unlikely to have involved marked changes in the socio-economic position of the tenant involved. Only 12 per cent of all tenants showed marked upward social mobility by moving into a higher class of holding size, whether by migration or other types of adjustment. There was a good deal of small-scale adjustment within the individual size groups, and geographical moves tended to produce more marked upward changes of holding size than non-migratory alterations. Significant downward socio-economic mobility was even less common. Most farmers finished their period of tenancy leasing a holding of more or less the same size as when they started, suggesting that the various levels of the tenantry were substantially self-recruiting and that despite the range of holding sizes the idea of a 'farming ladder' had only limited applicability.

The difficulty of upward socio-economic mobility within the Panmure tenantry can be appreciated by examining the resources needed to stock holdings of a given size. This can be done using commissary court testaments. The total value of farming stock, including livestock, crops and implements, was abstracted for a sample of sixty-five tenants and sixteen cottars. The mean value of farming stock for cottars, £191 Scots, was not materially different from that of smallholders paying under five bolls (£100 Scots). This explains the ease of movement between the cottars and the lowest level of the tenantry noted previously. Above this level, however, the mean value of farming stock increased rapidly. Tenants paying between twenty-one and forty bolls of grain required seven times as much capital to stock their holdings, tenants of the largest holdings fifteen times as much. Given this scale of difference it is not surprising that few tenants in the two lowest size categories rose to acquire one of the largest holdings. The amount of capital needed to stock the latter suggests that inherited wealth must have been important in determining who was in a position to lease the larger holdings.

It is possible to make some assessment of downward mobility from the tenantry to the lower levels of rural society in Downie barony by comparing names of tenants with those of people who received money from the parish poor fund. Between 1660 and 1714, out of 118 tenants only twelve received any poor relief. Nine cases involved smallholders; only three tenants of larger holdings came onto the poor list after relinquishing their tenancies and only one received money on a regular basis. It was thus uncommon for tenants to sink to this level.

Stability and crisis in tenant society

Many features of tenant society at Panmure were clearly stable throughout the period under consideration, particularly the nature and level of rents, farm structures and holding sizes. Within this framework, how vulnerable were tenants to short-term economic fluctuations? Some indications can be gained from studying the turnover of holdings, levels of rent arrears, and grain prices.

An analysis of the testaments of Panmure tenants mentioned above shows that they operated with very slim reserves. If the debts owing to and by tenants at their deaths are related to the value of their farming stock, 78 per cent had a net deficit which, had all the debts been called in at once, could only have been met by selling the livestock, implements and grain. In 13 per cent of the testaments the debts owed by the tenants exceeded the combined value of debts owing to them and farming stock, while only 10 per

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14 Scottish R O, CC Series, Brechin commissary court records.

17 The parish poor records are interleaved with the parish register, op cit.
cent had a credit surplus which equalled or exceeded the value of their equipment. This implies that tenants may have been highly vulnerable to short-term crises such as harvest failures. On the other hand, a high proportion of the debts owed by most tenants consisted of rent arrears, and much of their security or vulnerability would have depended on their landlord's attitude towards arrears. There are indications of an important element of what can be seen as paternalism, shown, for example, by the readiness to enter widows into their husbands' holdings, and by the way in which tenants were allowed to continue working a holding even though arrear renewal substantial rent arrears. Estate policy seems to have been to keep tenancies filled as far as possible even when the rent could not be paid immediately. Instances of holdings not being cultivated due to the lack of suitable tenants were rare.

While the financial weakness of the tenants may have encouraged a flexible attitude towards arrears by the landlords, the system also reinforced the farmers' dependent position. While most rents were paid in grain, arrears were charged at a money equivalent. Undelivered grain was charged against the tenant at the market rate for that particular year. Thus, after a poor harvest when prices were high, tenants accumulated heavy arrears which they had to try and pay off from surplus production in good years when prices were low. It might have taken several years to write off arrears accumulated after one bad harvest.

While the survival of such rent structures into the eighteenth century in Lowland Scotland may be attributed in part to inertia and a lack of economic growth, the system may also have been a method of social control which prevented tenants from accumulating enough capital to enter the land market. A recent study of land ownership in Forfarshire during the late seventeenth century has emphasized the absence of any 'peasant' land market and stressed the ability of the nobility and shire gentry to remain exclusive groups capable of resisting penetration of the land market by outsiders; for example, by urban burgesses. Such rent structures may have helped landowners to distance themselves from their tenants by maintaining the gulf between proprietor and tenant as the greatest single division within Scottish rural society. The existence of large sums in arrears may also have enabled proprietors to borrow money more easily, while the arrears themselves gave them direct control over their tenants.

The prices paid by Dundee and Montrose merchants for Panmure oatmeal (Fig 2) give a general indication of the quality of harvests in the second half of the seventeenth century, though conditions for individual baronies and farms may have varied. The trend of prices corresponds broadly with those for eastern Scotland as a whole, with generally low prices from the 1660s through to the 1690s and then a sharp increase reflecting a succession of poor harvests which brought widespread famine conditions. The pattern of rent arrears correlated highly with prices (+0.72, significant at the 0.01 level), though even during the period of generally low prices between 1660 and 1695 some arrears still occurred in all baronies in each year.

The crisis of the later 1690s affected all tenants, though in Carmyllie, where rents were paid in money, the increase in arrears was much lower proportionally than elsewhere. Whatever the social and demographic effects of the harvest failures, the economic crisis was prolonged. Arrears began to build up rapidly after the first sharp rise in prices following the harvest of 1696, but although prices fell after 1701, arrears remained at far higher levels than during

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most of the second half of the seventeenth century until the data for most baronies terminate in 1714. In Kelly, where the series continues into the 1740s, arrears peaked at about twelve times the 1695 figure but remained at around nine times this level until 1711, after which they fell slowly, though without returning to late seventeenth-century levels. As late as 1717 the barony accounts list arrears specifically for 'crop 1699 and before' and sums of money described as 'old rests' were listed separately through the 1720s and 1730s, gradually diminishing, in all probability, as tenants died off rather than as debts were repaid.

To what extent were economic fluctuations reflected in the rate of turnover of the tenants? There was virtually no correlation between the annual turnover of tenants and levels of arrears for the same crop year. Correlations between arrears in any crop year and turnover in the succeeding two, three or four crop years were only very weakly positive, and were not statistically significant, suggesting only a slight time lag effect. Difficult economic conditions do not seem to have led to a markedly increased turnover with bankrupt tenants relinquishing their holdings. A notable feature is that there was no sudden rise in turnover during the late 1690s. Along with the fact that no farms were left untenanted, this indicates that no matter how indebted tenants became they were not displaced. Farms continued to be occupied and when a holding fell vacant a new tenant was found. The period from 1696 to 1701 is indeed characterized by relatively low rates of turnover. With the crisis being so widespread there may have been little incentive for tenants to move elsewhere, while the factor may have been unwilling to allow tenants to move to other estates as this
would have made the recovery of arrears more difficult. Only around 1702 was there a rise in turnover, but overall from 1696 to 1702 the turnover of tenants was only marginally higher than for 1689–95. While it is difficult to assess the effects of such crises on the morale of tenants they did not lead to large-scale displacement.

Conclusion
This paper has merely introduced a largely unexplored topic. Nevertheless, tenant society on one Scottish estate has been shown to have been more complex than previous models have allowed for. There was more continuity of occupation of holdings than expected and the prevalence of short leases did not necessarily in itself cause high levels of turnover. Some interesting contrasts in mobility patterns among the tenantry existed, however, and further investigation of the demographic background to farming, such as age at first marriage and first tenancy, and life expectancy, may help explain them. Tenants were geographically mobile but on a more limited scale than expected and over shorter distances: their responses in changing the sizes of their holdings seem to have been essentially cautious. Tenants may have formed a comparatively stable element within rural society, being less mobile than cottars or farm servants, but the relationship between these groups and the tenantry requires clarification to determine to what degree they were linked by life and labour cycles: for example, whether it was common for sons of tenants to work away from home as farm servants before acquiring their first holding. The Panmure tenantry was more markedly stratified than might have been expected, but there was only a moderate amount of socio-economic mobility within the farming community and little indication of the existence of a farming ladder.

The contrasts in the amount of capital investment required to stock holdings of different sizes suggest that it may have been hard to build up the resources required to work one of the larger areas, other than by inheritance, reinforcing the idea of continuity and limited social mobility within tenant society. Patterns of debt, credit and capital accumulation within tenant society require further study. Limited socio-economic and geographical mobility, and the restricted participation in the market system implied by rent structures, indicate that the responses of tenants are likely to have been cautious and conservative. While their limited capital reserves may have rendered tenants potentially vulnerable to short-term economic fluctuations, they were protected by a system of estate management which simultaneously granted them reasonable security of tenure while reinforcing financial insecurity through a rent system which discouraged profit and worked against capital accumulation.

The crisis of the late 1690s, while undoubtedly severe, was not unique. It has been suggested that the demographic effects of the famine of 1623, which by comparison is poorly recorded, may have been far greater. However, the pattern of arrears following the late seventeenth-century crisis highlights the problems faced by tenants. It is not difficult to appreciate why commercial efficiency in agriculture should have been so low and innovations difficult to introduce. Tenants were caught in a vicious circle which could only be broken by alterations in rent structures, more direct participation in a market economy, and greater capital accumulation. The existing system ensured that when prices were low, as between the 1660s and mid-1690s, tenants could accumulate little capital, whereas when prices were high they built up debts which could wipe out the marginal returns from several favourable harvests. Changes in this system were introduced only gradually during the eighteenth century. It must be emphasized

that while this study of a single estate may have some general validity for arable areas of eastern Scotland, particularly north of the Tay, different farming economies, different farm and holding structures, and different estate management policies could have produced contrasting conditions within the tenantry, greater capital accumulation and different responses to economic change. It is hoped that further research will shed more light on some of the questions which have been raised here.

Notes on Contributors
(continued from page 158)

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J M MARTIN, a former lecturer in economic history at the Universities of Bath and Belfast and at the Middlesex Polytechnic, has just completed a year as education archivist in the Gloucestershire Record Office. He has recently completed studies of the Vale of Evesham gardeners, and of Bedworth, a Warwickshire weaving and mining community. He is currently studying agricultural innovation and rural protest 1815-50 in Gloucestershire and neighbouring counties.

MS M E HOLT is a postgraduate student in the Department of Geography, Exeter University, and is currently completing her thesis on upland farming in northern England, *circa* 1840-1880. The focus of this research has been on the role of farmers, as opposed to landlords, in bringing about agricultural change in the uplands. It has included an analysis of regional differences in farmers' financial resources, and an examination of the consequences of their inheritance practices for farm management and agricultural investment in the uplands.
GEOGRAPHICAL MOBILITY IN A SEVENTEENTH-CENTURY SCOTTISH RURAL COMMUNITY

Ian and Kathleen Whyte

In recent years research has been undertaken on many aspects of geographical mobility within English rural society during the sixteenth, seventeenth and eighteenth centuries. It has long been appreciated that substantial migration from the countryside to the towns occurred during this period. Given the high urban mortality rates which have been shown to have existed larger towns could only maintain their population and grow by means of a steady stream of migrants from the countryside. However, it has also become clear from the study of a number of rural communities that high levels of mobility occurred in the countryside as well and that even in more remote areas the rural population was far from static. Geographical mobility was an important dynamic element in early-modern England’s economy and society. There has, however, been a lack of similar research on contemporary Scotland. Much less is known concerning the structure of rural society in early-modern Scotland than is the case with England and, with the exception of recent pioneering work by Houston, little comparative work has been undertaken to determine the extent to which Scottish society mirrored or contrasted with that of England during these centuries.

In the later eighteenth and nineteenth centuries the Scots were notably mobile both in terms of internal and overseas migration leading to speculation as to whether there may have been inherent features in Scottish rural society at an earlier date which encouraged high levels of mobility. In the seventeenth century large-scale movements of population such as the plantation of Ulster, and the readiness of young Scotsmen to enter mercenary service abroad, certainly indicates a propensity to migrate by some sectors of the population under certain circumstances. Was this underpinned by a substantial amount of mobility at home?

Certain features of rural society in lowland Scotland at this time may have encouraged population mobility. Landholding was characterised by the prevalence of large estates on which most of the land was worked by leasehold tenants. Most tenants held their lands by short leases, or tacks, and tenancies at will. It has been assumed that this caused widespread insecurity of tenure and this has been linked implicitly to high rates of mobility among the tenantry. Labour on the tenants’ holdings was provided in part by married cottars who sublet small portions of arable land in return. Clauses in the leases issued by some estates suggest that particular cottars were often attached to individual tenants and accompanied them when they quitted one farm and moved to another. Labour was also supplied by unmarried male and female farm servants who negotiated annual contracts which provided opportunities for frequent moves from farm to farm. In later times Scottish farm servants were certainly highly mobile within restricted areas. The continuation of major subsistence crises into the early eighteenth century may have maintained high levels of what Clark has termed ‘subsistence migration’. Movement of vagrants
may also have been encouraged by a system of parish poor relief which, while officially taking a strong line against "masterful" or able bodied beggars, and trying to restrict payments to resident poor, nevertheless often provided some relief to the travelling poor. A dispersed settlement pattern, a lower population density than much of England and an economy with a strong overall pastoral element may all have encouraged mobility at regional and local scales.

In order to establish whether such influences did encourage geographical mobility detailed studies of particular rural communities are necessary. One drawback is the poorer quality of source material for this kind of research compared with England. For example, well-kept parish registers with few gaps are infrequent before the eighteenth century even in the lowlands and their general lack of information on burials makes full family reconstitution impossible. Nevertheless, a good deal of work can still be undertaken. The present introductory study examines some aspects of the mobility of different groups within rural society in part of the sheriffdom or county of Forfar during the later seventeenth and early eighteenth centuries. Attention is concentrated on the estate of the Earls of Panmure. The estate was divided into baronies, units of legal jurisdiction which also served as units of agrarian administration. The main part of the estate, in the later seventeenth century, consisted of the five contiguous baronies of Carmyllie, Downie, Inverpeffer, Kelly and Panmure, located in the coastal lowlands between Dundee and Arbroath (Figure 1). The estate factors or stewards maintained particularly good sets of annual accounts and rentals at this period, most of which have survived, along with a substantial body of leases. These sources provide information concerning the tenant farmers on the estate and can be used as a framework into which data from parish registers, inventories of possessions in the records of the local commissary court, and records of the kirk sessions, the bodies for maintaining church discipline and administering parish poor funds, can be fitted.

The mobility of tenants

The annual rentals allow the mobility of tenant farmers within the estate to be examined. 698 tenants are recorded in the five baronies between 1660 and 1710. Only 111 or 16% of them can be traced as moving from one farm to another within the estate during this period. This figure clearly underestimates total mobility as it takes no account of movement into and out of the estate. However, figures for individual baronies allow us to come closer to the overall level of mobility. Kelly had the highest proportion of geographically mobile tenants with 27% of the 155 farmers moving internally or to and from other baronies. Kelly was located on the coast and was bounded by other Panmure baronies on over half its landward perimeter. Given the limited distances over which most migration to new farms took place (see below) it is probable that this figure is not a great underestimate of total mobility including moves into and out of the barony from beyond the estate. Overall it is probable that about a third of the tenants studied migrated from one farm to another during this period.
These figures suggest that tenant farmers were not as highly mobile as might have been expected. Although short leases of under seven years were normal on the estate for at least part of the period, renewal often seems to have been automatic. If short leases fostered insecurity of tenure it was not reflected in high rates of mobility from farm to farm. Only 21% of the tenants who did migrate within the estate moved more than once. One reason for the lack of movement was the ease with which many tenants were able to alter the amount of land which they worked without moving to another farm. About a third of the farms on the estate were in multiple tenancy so that it was often possible for tenants to enlarge or reduce their holdings by increasing or decreasing the share of the farm on which they worked. Multiple leasing, where tenants took over additional land on neighbouring, separately-named farms, was also widely practised. Migration within the estate accounted for only a third of all changes in holding size. Differences in farm structure between baronies caused some variations in the level of mobility. In baronies where multiple-tenant farms were fewer or a large mean holding size discouraged multiple leasing migratory moves were more important. In Downie, where both these circumstances applied, migration accounted for as much as 58% of all changes in holding size.

When tenants did move to other farms the distances involved were short. 76% of all moves within the estate were under five km, 54% under three km. 70% of moves occurred within, rather than between, baronies. Restricted horizons of mobility are also shown by the pattern of movement of new farmers into the estate. Surviving leases specify the origins of entering tenants. Out of 268 leases only 14% were granted to farmers coming in from outside the estate. 69% of these ‘outsiders’ came from farms on other estates but within the same parish as the Panmure farm to which they were moving.

The mobility of tenants and cottars

How did the mobility of tenants compare with that of the other major group of married men, the cottars? It might be hypothesised that levels of mobility of cottars and tenants would have been similar if their movements from farm to farm were linked: a move to another farm by a tenant might have resulted in the displacement of several cottar families but the proportion of each group which was mobile should have been comparable. Alternatively, if cottars were free agents the large number of available cottarages, the flexibility given by the crafts and trades which they frequently practised, and the limited amount of livestock and farming equipment which they possessed, may have made movement comparatively easy. It is harder to study the mobility of cottars as they are poorly recorded. Tenants, as rent payers, figured prominently in estate records while cottars did not and in addition they are rarely designated as such in parish registers. However, the register for Monikie parish,13 which included Downie barony (Figure 1), is not only well kept from the early seventeenth century but, in the first years of the eighteenth century it frequently listed the place of residence within the parish of fathers baptis-
ing children. When this is given as the 'cottoun' or cottar settlement of a farm rather than the farm itself, the person concerned was almost certainly a cottar. This allows some aspects of the mobility of cottars to be examined. From 1703, when references to place of residence begin, until 1714 when the run of estate records ceases eight out of thirty three Downie cottars made a move to other farms within Downie barony compared with seven out of forty eight Downie tenants. A chi square test did not indicate a significant difference between these two groups and the hypothesis requires further testing though there is some suggestion that cottars may have been more mobile than tenants. Insufficient data were available to determine the extent to which the movements of particular tenants and cottars were related.

The cottars were not a uniform group in terms of mobility though. When the marriages and runs of baptisms of cottars are examined there seem to have been two distinct groups of mobile and stable cottars. Out of sixty cottars who first appear in the register of baptisms in Monikie parish between 1703 and 1714 twenty two, or 37% had not been married in the parish, indicating that they had moved into the parish after marriage. Of this group sixteen out of twenty two, or 73%, are recorded as having baptised only one or two children before disappearing from the parish records. Of the cottars who had been married in the parish only ten out of
thirty eight, or 26%, subsequently had only one or two children baptised while many of them had six, seven, eight or more. A chi square test indicated that the difference between the two groups was highly significant. As the parish register does not list burials it is impossible to determine how many of the runs of baptisms in each group were terminated by the death of one of the parents rather than movement out of the parish but there is no apparent reason why the proportion should have differed between the two groups. In the case of the cottars who had not been married in the parish it is probable that most of them had moved out of the parish again after only a year or two. There are interesting parallels with the tenantry here for tenants who were married in Monikie tended to remain in the parish significantly longer than those who had been married elsewhere. If cottars were accustomed to move with particular tenants it is probable that the two migratory groups were linked but again this requires further research.

Marriage mobility

One might also expect there to have been some differences in marriage patterns between tenants and cottars. Between baptism and marriage a high proportion of future cottars are likely to have spent part of their adolescence working as farm servants possibly on several farms. This is likely to have been less common for future tenants. There are indications that social mobility into the tenant group from the ranks of the cottars was mostly confined to the lowest levels and that, given the substantial amount of capital needed to stock the larger holdings, recruitment into the tenantry was mainly internal with many farmers being the sons of tenants. One would therefore expect that many tenants would have worked on their fathers' holdings until they were ready to take them over or their fathers could afford to set them up on holdings of their own. On this basis it could be hypothesised that between baptism and marriage cottars would have been more geographically mobile than tenants.

The Monikie parish register indicates that thirty four of the thirty eight cottars listed in the early eighteenth century who were married in the parish had not been baptised there. This compares with only twenty three of the forty small tenants in Downie barony, leasing holdings of only an acre or two, and twenty one of the forty four larger tenants. A chi square test indicates that the difference between the cottars and the other two groups was highly significant and the hypothesis appears to be confirmed.

It might also be expected that there would have been some difference in the choice of marriage partners between tenants and cottars. Because it required much more capital to set up as a tenant farmer than a cottar it may have been desirable for prospective tenants to marry girls whose families could provide useful marriage portions. Tenants might also have chosen the daughters of tenants as wives as they would have received some training and experience in the management of the household and dairy which would have been important in the farm economy, while, given the evidence that the different levels of tenant farmers were mainly self-
recruiting, the social status of a wife would have been important too. Tenants are thus likely to have married mainly within their own group.

As they formed a comparatively small proportion of the population tenants are likely to have tended to look further afield for their brides than cottars. When the origins of marriage partners for cottars, small tenants and larger tenants are examined only eight out of thirty eight cottars chose brides from outside Monikie parish. This compares with eleven out of forty small tenants, who were only engaged in agriculture part time and whose level of wealth was only marginally greater than most cottars. By contrast thirty one out of forty four tenants of larger holdings chose partners from outside the parish. A chi square test showed a significant difference between the larger tenants and the other two groups but not between small tenants and cottars. Despite the greater level of mobility of cottars before, and possibly after, marriage tenants had wider horizons when it came to choosing their brides.

**Mobility of farm servants**

It is harder to come to any firm conclusions regarding the mobility of farm servants. Farm service was a life cycle phase for young, unmarried men and women, most of whom subsequently became cottars and tenants, or their brides. They were probably less likely to be recorded in any documentary source at this stage of their lives than any other. Nevertheless, some glimpses of them can be obtained from kirk session records. A high proportion of the cases of fornication brought before rural kirk sessions probably involved farm servants. In the case of the Monikie kirk session register the status of persons involved in such cases is only occasionally specified. However, it is interesting to note that in half the cases where people are identified as farm servants, one or both partners had removed to farms in other parishes at the previous Martinmas hiring. In some instances one may suspect that the move represented a deliberate attempt to avoid responsibilities and the censure of the kirk session, as in the case of Thomas Songster, a farm servant, who got one of the female servants on his farm pregnant and had joined the army by the time the case came before the elders. However, it was probably difficult to avoid the discipline of a church whose arm, at a regional level at least was long, and it is probable that most of the moves to adjacent parishes were made in the normal course of the farm servants' careers. Given the large sizes of the parishes concerned this suggests that there was an even higher incidence of internal moves, but more detailed research is required to confirm this.

**Mobility of vagrants**

The kirk session register of Monikie also provides some insights into the composition and movements of the vagrant poor. Between 1600 and 1710 520 payments are listed and while their recording is variable in occurrence and detail they probably provide a reasonable picture of the make
up of the vagrant poor in this district. Despite Acts of Parliament which tried to prevent begging by gangs of able-bodied men and women24 20% of all payments in Monikie were made to groups of vagrants, sometimes referred to as 'rancy beggers' or merely 'strangers'. While the judgement can only be qualitative at the moment one gets the impression that such groups were more common in Scotland at this time than in England.37 There are no indications of size and composition of these groups. Another 25% of payments were made to individual 'supplicants' and 'strangers' without any additional information.

For the remaining 285 payments some details are available. 73% of them were made to men and only 27% to women; the proportion being comparable with that for English vagrants studied by Slack.38 The entries made by the session clerk sometimes hint at the reasons behind people's vagrant condition. The most common was blindness or physical deformity accounting for 40% of payments to individuals where specific details were given, with sickness amounting to another 5%. The next largest group was people whose houses and possessions had been destroyed by fire, accounting for some 11%. Some payments were made to people whose distress was clearly only temporary, including two shipwrecked seamen, two discharged soldiers and a man who had been robbed. Such people may only have required assistance in order to return to their home parish. Bankrupt tenants were, perhaps surprisingly, only mentioned twice.

The remainder of the payments were to people whose designations indicate that they had formerly held a social position of some status. People designated as gentlemen, gentlewomen, of with the title 'Mr.' made up 19% of the specific payments, former schoolmasters, doctors, ministers and burgesses another 8%.

Clark and Slack have characterised the movement of vagrants in England as having been predominantly long distance and though Slack has indicated that some vagrants seem to have had regular itineraries the overall impression is that their movements were very much random ones.39 Some of the vagrants recorded in Monikie were definitely moving more purposefully, possibly through a regular circuit of parishes. For example, William Bouack, sometime schoolmaster at Forfar, appeared as a supplicant in Monikie for several consecutive years but always at the same season, payments to him being grouped within a period of five weeks during September and early October. Likewise, William Lyell, variously described as a 'poor man' and a 'stranger' appeared once every summer for many years, generally in July. Other vagrants made less regular appearances but from the frequency of their visits must have been operating within a comparatively restricted area. This contrasts with Slack's findings for England.38 The smaller Scottish burghs, less anonymous than larger English provincial towns, may have held less attraction for vagrants who could be comparatively easily supervised by burgh councils. It is possible that in Scotland at this time the movements of vagrants were tied more to the countryside where food of various kinds could probably have been obtained more easily than in the towns. The patterns discernible in Monikie parish may have been linked to seasonal rhythms in the market for
casual labour. Where kirk session records are well kept for a group of contiguous parishes it may be possible to examine these ideas in more detail.

Conclusion

This introductory survey has indicated some of the potential of Scottish sources for studying population mobility in early-modern times. The documents which have been examined have allowed the testing of a number of hypotheses and the results of these tests have to some extent modified existing views on the level and nature of geographical mobility in rural society in lowland Scotland at this time. Tenant farmers were less mobile than expected, partly due to the influence of farm structures and holding sizes which facilitated non-migratory adjustments in the amount of land which they worked. When tenants did move from farm to farm their migration fields were limited. The tenantry thus appears to have formed a comparatively stable sector within society on the Panmure estates despite leasing systems which, superficially, might have been expected to have caused insecurity and a high level of turnover.

Cottars appear to have been somewhat more mobile than tenants during their adult working lives and also more markedly so between baptism and marriage, although the extent to which movements of cottars and tenants were related has yet to be established. However, there were clear contrasts in mobility among the cottars just as there were within the tenantry. On the other hand, when it came to choosing a bride, tenants tended to look further afield than cottars, perhaps because of the need for greater care in choosing a partner from the right background.

It has not been possible to discover much about the movements of farm servants although the few available indications suggest that they were highly mobile. However, it must be remembered that male and female farm servants were in a temporary life and labour cycle stage from which most of them went on to become cottars or their brides, and some to acquire tenancies. Kirk session records bring out some aspects of the vagrant poor. This group was far from being homogeneous. Travellers receiving charity ranged from groups of beggars who may have formed a near-professional element within the vagrant population, to distressed gentlefolk and former professional men. The movements of some individuals at least were not random as they seem to have returned repeatedly to the parish studied at the same season for several successive years.

This study has emphasised some of the variations in the levels of mobility which existed within rural society in lowland Scotland during the seventeenth and early eighteenth centuries: It has also underlined the importance of considering mobility in relation to life cycle stages. It is hoped that further detailed work on other communities will be able to clarify the picture presented here and shed more light on the causes, as well as the patterns of mobility.
NOTES

1. An effective recent summary of this work is contained in: Patterns and processes of internal migration, Open University D.301 Historical sources and the social scientist, 1982.


7. J. E. Handley, Scottish Farming in the Eighteenth Century, 1953, p. 120, 201.


12. Scottish Record Office, Dalhousie muniments, GD 45 18, series of rentals and accounts commencing no. 1 and leases no. 148.


15. The kirk session material is interleaved with the parish register referred to above.


18. Ibid., p. 364.


SHIELINGS AND THE UPLAND PASTORAL ECONOMY OF THE LAKE DISTRICT IN MEDIEVAL AND EARLY MODERN TIMES

Ian D. Whyte

We know relatively little about the progress of colonization and exploitation of the Lake District in the centuries after the Norse settlement. The place-name evidence is difficult to interpret and documentary sources are both fragmentary and late compared with other parts of England. Charters and pipe rolls give some indications of the patterns of economic development in the area from the twelfth and thirteenth centuries onwards but for many topics, such as the nature and extent of open field systems, historical records do not become informative until the sixteenth century.

Due to the limitations of available sources and a lack of detailed research some generalized impressions regarding the development of the Lakeland economy in medieval and early-modern times have become established. These may be at best misleading and at worst myths. A recent paper on settlement in the Lake District, for instance, refers to the ‘Norse sheep-farming colonists whose direct descendants in time became the “Statesman” farmers’. The assumption that the Norse settlers were primarily sheep farmers may be linked to the supposed Scandinavian origins of the Herdwick breed, but it has yet to be adequately demonstrated. The present importance of hill sheep farming in the Lake District and the area’s specialization in the production of coarse woollens in late-medieval and early-modern times has perhaps encouraged the significance of sheep in the Lakeland economy to be projected further back in time than is strictly warrantable. Other evidence suggests, however, that the economy of this upland area was more diversified and less dependent on sheep-rearing in the early medieval period and even during the sixteenth and seventeenth centuries than has sometimes been supposed. The varied resources of this region, more complex in its physical geography than, say, the Pennines, were exploited in a complex integrated system. This chapter examines some facets of the development of settlement and economic activity in the Lake District in the period from the eleventh to the sixteenth centuries, in an attempt to form a bridge between the Norse colonization and the present Lakeland landscape.

AN OUTLINE CHRONOLOGY

A broad outline of the history of settlement and land use in this area from Norse times to the later Middle Ages can be established using a combina-
tion of palaeobotanical evidence and documentary sources. The former is particularly useful for the earlier period when manuscript material is lacking. The vegetational history of the Lake District has been reconstructed by Oldfield, Pennington and others from the analysis of pollen deposits in peat bogs. The evidence indicates a major phase of oak wood clearance in the interior valleys coinciding with the Norse colonization. Recent work by Higham on the continuity of settlement from Romano-British times in the Eden and Solway lowlands has suggested that Norse settlers moved into less fertile areas around the more densely settled zones. The apparent extent and rapidity of the deforestation may indicate a rapid penetration of the upland valleys as well as occupation of areas immediately peripheral to the main population centres. The number of settlers involved in this phase of clearance need not have been large: the ecological effects of a small population with a pastoral economy, especially practising transhumance, could have been considerable.

Following this there was a brief phase of woodland regeneration which may indicate some abandonment of settlement during the unsettled political conditions around the time of the Norman Conquest. Although the Domesday survey does not cover the area, large numbers of vills in north Lancashire and the Pennines were waste at this time.

The next phase has been interpreted as a resumption of pastoral farming though at a subdued level. Chronologically this corresponds to the two centuries or so after the Norman Conquest when much of the Lake District, the lower hills as well as the high fells, was designated as royal and private hunting forest. Both royal forests and free chases were subject to controls on land use and colonization. Activities such as settlement, assarting and the cutting of timber were regulated but it is important to note that these forests were nevertheless available as pasture. For example, in the Forest of Inglewood, whose main grazing areas included parts of the North Lakeland fells, the pasturing of livestock was the largest source of revenue in the thirteenth century. The implication is that while permanent settlement within the forest areas was restricted, the use of temporary summer shielings was permitted. Indeed, this period may have seen the operation of upland shielings at its greatest extent.

The vegetation record indicates that this phase was followed by extensive woodland clearance for settlement and grazing. For the southern Lake District, Oldfield has linked this to the development of commercial sheep farming by the Cistercians. More generally, however, the period from the later twelfth to the early fourteenth century was one in which landowners permitted, even encouraged, major inroads upon the areas of waste contained within their hunting forests. This movement, probably under the impact of population pressure as well as the desire of landlords to increase their rents, is manifested in historical records by evidence of assarting in the forests with the enclosure and improvement of much land which had formerly been rough grazing or woodland. Many temporary shielings in the upper parts of the Lakeland dales may have become permanently occupied at this period.

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SHIELING SYSTEMS: THE PLACE-NAME EVIDENCE

The former existence of shielings as an important element in the pastoral economy of this area after the Norse settlement is manifest from place-names. Yet although there has been a good deal of work on some aspects of the place-name evidence relating to shielings, little is definitely known about the chronology and character of their use in this area.

Five place-name elements may be indicative of former shielings — the Old Norse loan-word árgi, whose origins some writers have placed in Ireland, others in Scotland, meaning a shieling or hill pasture; the Old Norse sætr and skáli which the volumes of the English Place Name Society treat as being broadly synonymous with árgi; and Middle English versions, skaling and schele. The last of these, although frequent as 'shiels' and 'shield' in the Northern Pennines, is rare in the Lake District. While there has been some discussion of the significance of árgi and sætr in this area, skáli and skaling names, which are far more frequent, have received little attention. Their distribution in the Lake District is shown, as far as is possible, in Figure 8.2.

A high proportion of the árgi names [Fig. 8.1] are located outside the main mountain areas, in the lowlands and lower fells of West Cumbria, the Kent Valley and the fringes of the Northern fells. Sætr names have, as Pearsall has noted, a more marked inland distribution within the mountain core, though lowland examples also occur, while the distribution of skáli and skaling is similar to that of sætr, though possibly with a greater concentration on northern Cumbria [Fig. 8.2]. Skáli names tend also to occur in more inland locations and at higher altitudes than árgi, with some bias towards higher, more remote locations than sætr.

The location of shieling names can be grouped into nine environmental categories under three broad headings [Fig. 8.3]. This highlights the contrast between the location of árgi names around, but not within, the higher mountains and the situation of places incorporating sætr and skáli. The lowland distribution of árgi has prompted Mary Higham to suggest that these did not represent former shielings at all but permanent cattle farms, forerunners of medieval vaccaries, while Gillian Fellows-Jensen has postulated that they may have functioned as heimseters, intermediate shielings located close to the main settlement areas. Pearsall, noting their tendency to occur on marginal sites, believed that they were 'residual' settlements established in a largely settled arable countryside and that they may have been established to exploit summer pastures. Certainly the marked contrast in their distribution with that of other elements suggests a different chronology and probably also a different function from places with sætr or skáli names.

The main difference in location between sætr and skáli names occurs within the higher fells, sætr predominating at lower levels within the main dales with skáli more frequent at a higher altitude, in small tributary valleys or on the slopes of the fells themselves. Pearsall has postulated an early Norse occupation of High Furness and upland Westmorland based
Fig. 8.1  Cumbria: relief and distribution of place-names with -erg elements.
Fig. 8.2. Cumbria: distribution of place-names with -sætr and -skali elements.
on the occurrence of sætr names with personal elements, as well as a later phase of occupation by people with Goidelic Scandinavian names in lowland locations which were marginal to existing settlements. This seems equally likely for skáli names so that, taken together, a relatively early penetration of the main Lake District dales, particularly in High Furness and the Keswick area, and possibly corresponding with the phase of clearance identified in the pollen record, is suggested by the occurrence of sætr and skáli linked to Old Norse and Old Irish personal names. While many of the names concerned can be shown from Domesday Book and early charters still to have been current in northern England in the late eleventh century, such sites are at least unlikely to have been named in later medieval times.

Overall the distribution patterns suggest a broad evolutionary sequence in which shieling sites were pushed further into the mountains and to higher altitudes as the margins of permanent settlement advanced, with a
tendency first for ðorgi and then sâtr to go out of general use, leaving skâli as the name which was generally attached to later shielings.

The term ‘scale’ was in current use in Denton’s time (c. 1610) to describe a shieling, and ‘scaling’ was the standard way of referring to shielings in thirteenth- and fourteenth-century charters. The fact that so many ‘scale’ names first appear on nineteenth-century tithe maps, however, suggests that some of them were formed comparatively recently, after shielings had been abandoned throughout the Lake District. An enclosure of late eighteenth- or early nineteenth-century date was named Scale Close, for instance, from the remains of an apparent shieling hut of unknown age within its walls.

It should be remembered that the use of summer pastures did not necessarily involve a great altitudinal difference between permanent settlement and shieling. The distance may have been largely horizontal as in the northern and western isles of Scotland where nearby moorland and uninhabited islands were used in summer in this way. The difference might have reflected only a contrast in land capability at a time when the density of settlement was low, as in the use of coastal marshes and sand dunes for summer pasture elsewhere in Britain.

SHIELING SYSTEMS: THE HISTORICAL EVIDENCE

The great range of environments in which present-day settlements whose names contain shieling elements occur, shows that settlement margins have expanded through time. The process by which shielings became permanently colonized and new shielings established further into the uplands, sometimes to become permanently colonized in turn, is known from later times in Scotland, but has hardly been examined for the Lake District. It is possible to date some of the phases of this evolution from historical sources, though establishing a chronology of the use and eventual conversion of shielings to farmsteads is difficult from documentary material. There are indications that many shielings in lowland areas had become permanently settled before the period of more detailed documentation from the thirteenth century onwards. Even after this time references to functioning shielings are infrequent, probably because in most extents and charters they were subsumed under general references to pasture.

To a limited extent one can work negatively by establishing from documents the earliest date at which a settlement with a shieling name was recorded as permanently occupied. Many early references to such places in charters are, however, vague and ambiguous. Using evidence of this type one can show that many former shieling sites at low altitude in the Kent and Lune valleys were permanently settled by the later eleventh or early twelfth centuries. Thus Mansergh appears in Domesday Book as a vill assessed at three carucates. By the early thirteenth century, when more detail is available, places like Scalthwaiterigg and Skelsmergh, north-east of Kendal, were also permanently colonized. If such a process were
widespread in the Lake District, then a considerable expansion of settlement must have occurred between the creation of places with early shieling names following the Norse settlement, and the thirteenth century. If we accept the evidence of the vegetation record regarding the reversion to woodland around the eleventh century, possibly associated with some abandonment of settlement, then we have two relatively brief periods preceding and post-dating this phase during which this expansion is likely to have occurred. At present it is impossible to say how much of the spread of permanent settlement may have occurred before or after the eleventh century.

Despite the expansion of settlement and cultivation limits a shieling tradition survived in the Kendal area into the thirteenth century. References to a shieling in an extent of 1274, following mention of the settlements of Scalthwaitebrig, Hoton (New Hutton), Schoureschale (itself a former shieling which may not have been long occupied at this date) and Oxenholme, suggest that it may have been located in the moorland north-east of Kendal, perhaps on Hay Fell.21 In the more remote interior valleys of the eastern fells, shielings continued in use at least into the late fourteenth century. In Longsleddale, Sadgill (sæträ-gil), now the highest farm in the valley, was the site of a group of shielings (scælingae) in 1307, and references to shielings in Longsleddale as late as 1360 may relate to Sadgill or to a location even closer to the valley head.22

On the northern fringes of the Lake District, rapid assarting and encroachment was occurring in the royal forest of Inglewood during the twelfth and thirteenth centuries. Denton, writing in the early seventeenth century, dated the conversion of shielings like Gaitsgill to the reign of Henry II.23 A shieling was still functioning in 1317 at Hazelsprings, at an altitude of about 700 ft (213 m), but the context in which it was mentioned indicates that it was in imminent danger of becoming incorporated within the assarted area.24

In the western coastal lowlands shielings such as Seascales had probably been converted to permanent settlements at an early date and by the late twelfth century the use of land for summer pasture had been pushed into the upland massif, particularly in the south where the coastal plain was narrower. A grant of c. 1210 exists for shielings by Crookley Beck, a stream draining the north side of Black Coombe behind Bootle and the site has been linked to remains at an altitude of c. 650 ft (198 m).25 Further north, another charter of c. 1210 granted to the borough of Egremont the right to build shielings on Long Barrow, the fell which projects into the coastal plain south of Ennerdale. These shielings were still in use at the end of the thirteenth century.26

In the country south of Penrith former shielings like Tirril were the centres of estates with demesnes of their own by the thirteenth century, active shielings having been pushed back far into the mountains. Documents concerning a dispute over grazing rights show that in the 1260s and 1270s shielings were operating in the remote valleys of the Martindale area south of Ullswater. One reference locates a shieling on or below Steel Knots between Boardale and Bannerdale.27

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It is difficult to determine, however, when the custom of sending livestock with a substantial part of the community to temporary settlements on the summer pastures actually ceased. The historical evidence suggests that the use of shielings had become confined to the central mountain core of the Lake District by the fourteenth century. The Percy survey of 1378, covering large areas of north-western Lakeland, contains only one specific reference to shielings. This is to two 'scale steads' in 'Hussacre (Uzzicar) Dale', presumably one of the smaller valleys west of Derwentwater. Given that the survey listed squatter encroachments, which were charged rents, it is unlikely that it would have omitted to record the existence of groups of shieling huts, particularly if they were accompanied by any enclosed meadows or improved in-by-land, though individual herdsmen’s huts may have gone unmentioned. The conclusion must be that while vestiges of a shieling tradition continued into the sixteenth century, it was probably confined to a limited number of sites in remote areas.

SHIELING SYSTEMS: THE ARCHAEOLOGICAL EVIDENCE

Rollinson has commented on the rarity in the present landscape of structures which can be interpreted as the remains of shieling huts in any way comparable with the well-preserved ones which survive in parts of the northern Pennines. This, and the lack of references to the practice in the later documentary record, suggests that the use of shielings in the Lakeland mountains died out at an earlier date than in areas like the upper Tyne where they continued to function into the seventeenth century.

A limited number of structures have been identified by the Royal Commission for Ancient Monuments and others as being the remains of possible shielings. Some of these have affinities with the shielings of the North Pennines; others are markedly different like the rectangular huts in Ennerdale closely surrounded by outer enclosures which have been associated with iron working rather than pastoral farming. The sites identified by the Royal Commission are concentrated within the central fells, only one group east of Gosforth and a structure at Crosby Ravensworth being peripheral. It may be significant that four of the nine sites are closely associated with skåli place-names and only one, loosely, with a scætr name. The location and altitude of most of these sites within the central fells, well above present settlement limits in most cases, suggests that if they are shielings then they must have been relatively late in date: similarly remains such as those identified by Cowper in Little Langdale and the Troutbeck area.

It is questionable, however, whether these structures truly reflect the distribution and character of former shieling sites above the limits of present settlement and cultivation within the Lake District mountains. First, it may be significant that five of the nine sites discussed by the Royal Commission (including the structure at Crosby Ravensworth, the examples cited by Cowper in Little Langdale and at Troutbeck, and the
remains at Seat Sandal)\(^\text{34}\) consist only of single structures. If the Ennerdale huts are omitted as a special case, then only three groups of huts have been identified and discussed in detail. By analogy with shieling systems elsewhere one would have expected most sites to have been occupied by groups of huts belonging to communities rather than by single structures. Indeed, some of the documented examples, such as the ones at Sadgill, clearly refer to groups of huts.\(^\text{35}\) In addition, if it be accepted that shieling systems were operating in the Lake District from at least the eleventh century until the sixteenth, then one might have expected the construction and plan of shieling huts to have varied through time. The isolated character, therefore, and substantial construction of some of the rectangular stone structures which have been tentatively described as shielings may indeed suggest that their function was more permanent and that they may have been marginal squatter homesteads dating from the sixteenth century when population pressure was mounting, expanding the margins of settlement.\(^\text{36}\)

**THE SHIELING ECONOMY**

When the land capability of areas bearing shieling names is examined, it is not surprising that very few are on or adjacent to the limited areas of highest quality land in the region. This Grade 2 land is located mainly in the middle Eden valley and the northern part of the coastal plain. While many former lowland shielings were located within areas of Grade 3 land, as one moves towards the uplands there was a marked tendency for them to be sited at the Grade 3–4 boundary or, further into the mountains, the Grade 4–5 boundary. In the Keswick area, for example, many shielings were located close to the margins of the limited spreads of better-quality (Grade 4) land [Fig. 8.4]. This suggests that sites were chosen not only for access to the hill and mountain pastures, but also for proximity to more fertile bottom land which initially may have provided hay for winter fodder and grass for autumn or spring grazing. Under pressure of population, and maybe improved drainage, such sites were obviously liable to become permanent farms with the bottom land brought into cultivation.

The use of shielings for the collection of hay is explicit in the case of Sadgill in Longsleddale which, in 1246, was leased along with three and a half acres of meadow. By analogy with the medieval Norwegian economy, however, winter fodder may also have been obtained from small scattered patches of richer grass in streamside locations or in flushes. Given careful herding during the summer, together with appropriate enclosure, this may help to explain the association of shieling names with streams — there are some 30 \(skáli\) and \(sætr\) names linked with ‘beck’ and ‘gill’ — though access to fresh water was always a key factor for people and for animals at the summer pastures.

Another possible reason for locating shielings in the valleys may have been to tap a further source of grazing or winter fodder, leaves from the valley-side woodlands. References in the records of Furness Abbey during
the sixteenth century show that it was customary to use leaves for fodder.\textsuperscript{37} Again, by analogy with Norway, the preferred trees may have included birch and alder,\textsuperscript{38} common species in the higher dales.

In many parts of the Lake District there are indications of the survival of substantial areas of woodland into the later Middle Ages. This is often emphasized by the importance of pig-keeping in the economy, and the importance of pannage may explain the frequency of former shielings with swine names. There are at least seven Swinesides and Swinesetts in the area, by far the most common livestock name attached to shieling elements. This may indicate that \textit{sætr} and \textit{skáli} names were applied to sites relating to different types of pastoral activity, and that the places referred to as swine \textit{sætr}s may have held a hut for a single herdsman rather than groups of structures accommodating a substantial proportion of the community and linked to the milking of cattle, sheep and goats. Pigs could have been integrated with other woodland uses to a greater degree than other livestock as they did less damage to young trees and even promoted woodland regeneration by treading acorns and eating small vermin which attacked young seedlings.\textsuperscript{39}
THE CHANGING PASTORAL ECONOMY

The evidence for the existence of shieling systems in the Lake District during the early medieval period suggests that the pastoral economy of this area, if not concerned solely with cattle, at least contained a substantial cattle element. This is also shown by Pearsall’s study of ecological indicators in Lake District place-names, where it is demonstrated that names referring to cattle and swine recorded before 1400 were far more numerous in the central mountain area than names referring to sheep. The earliest examples of names containing sheep elements occurred in lowland districts containing Anglian settlement names. Pearsall considered that large-scale sheep farming in the central Lake District only developed when predators such as wolves had been eliminated, allowing the free ranging of livestock. It has been further postulated that it was the monastic orders rather than lay landowners that introduced large-scale sheep farming, producing the ecological changes which have led to the present denuded appearance of the Lakeland fells.

If the monastic orders were responsible it was neither an immediate nor universal transformation. The records of the 1292 taxation of a tenth for the lands of Furness Abbey, describe granges such as Brotherilkeld in Eskdale and the one centred on Grange in Borrowdale as ‘vaccaries’ or cattle farms similar to ones which have been recorded from other upland areas in northern England. By 1537, however, Brotherilkeld was described as a ‘herdwick’ or ‘sheepcote’ indicating that a major change had taken place in its economy; and the lordship of Borrowdale, instead of a single vaccary staffed by lay brethren, contained forty-one customary tenants practising a mixed arable and pastoral economy.

The existence of vaccaries in the late thirteenth century does not preclude the existence of sheep farming as well. It is sometime forgotten that cattle rearing in the lower Lakeland valleys is integrated with hill sheep farming at the present day. Nevertheless, it has been suggested that cattle rearing may have better suited the use of grazings in royal and private hunting forests than sheep farming. The spread of sheep rearing may then have been linked to the decline of hunting forests in this area, as well as to the spread of commercial wool production throughout the northern Cistercian estates in the thirteenth and early fourteenth centuries.

J. D. Marshall’s study of the inventories of Lake District farmers also shows that even in the seventeenth century sheep were less important in the Lakeland economy than has been sometimes supposed. The average size of flocks was small and in most inventories the value of cattle was higher than that of sheep, even in hill areas. While many smaller farmers owned cattle but no sheep, it was less common to find yeomen who had sheep but not cattle.

It has already been suggested that the frequency of place-names referring to swine in the central Lake District implies the survival of substantial woodland cover, despite clearance from Norse times onwards. A charter of 1279, for instance, granted to Richard, son of Henry of Tirril, rights of
pannage for the swine of the Tirril demesnes in woodlands covering a wide area south of Ullswater including the lower slopes of Barton Fell, Fusedale, Hallin Fell, Banderdale, Place Fell, Boardale and Birk Fell.\(^46\) The terms of the grant show that virtually all the valleys and lower slopes of the fells in this area still contained a substantial woodland cover, and even as late as the sixteenth century the court rolls of High Furness are full of references to pasturing swine.\(^47\) This suggests that there must still have been substantial woodland pasture in Furness, though the fact that the references mainly concern stinting argues that the resource was under pressure and required careful management. Much of the woodland was probably scrub, whose character had been heavily influenced by grazing and other land uses, with little mature timber. Customary tenants of Furness Abbey had a traditional right to take timber for fuel and construction, and to let cattle and sheep browse on the leaves.\(^48\)

A reference to the woods of High Furness in 1537 records little mature timber of any value, but much underwood.\(^49\) Some of this may have been managed coppice woodland. Iron had been produced in Furness from medieval times and the smiths had the right ‘to cut down and use wood . . . sufficient to keep up the said smythes’.\(^50\) Pollen analysis of deposits from lowland sites in the southern Lake District\(^61\) points to the development of managed oak coppice from relatively undisturbed deciduous woodland during the mid-sixteenth century, but this trend may have started earlier elsewhere. A decree of 1570 mentioned that woodland was sufficiently plentiful in the Furness Fells to enable the setting aside of 60 acres of it at Garthwaite, 60 acres at Elterwater Park and 60 acres in Satterthwaite and Grizedale to supply charcoal to the Company of Mines Royal.\(^52\)

There are indications that by this time the woodlands were coming under heavy pressure from competing demands. Early sixteenth-century court rolls contain abundant references to fines for ‘greenhew’ or the unauthorized cutting of green wood, while a decree banning the use of bloomeries for iron making in High Furness demonstrates a conflict of interest between iron workers and customary tenants.\(^53\) In the long term though, the development of strict coppice management in association with the iron industry, far from depleting the existing woodlands, may actually have increased the area under coppice.

Sixteenth-century rentals of the lands of Furness Abbey and the 1578 survey of the Percy estates give good impressions of the character of upland settlement and farming at the close of the period under consideration.\(^54\) The granges of Furness had ceased to be settlements of lay brethren and had developed into communities of customary tenants, scattered in small hamlets surrounded by limited areas of improved in-bye land but possessing extensive hill grazings.

The economy of the central Lake District was predominantly pastoral but the importance of cereals as the dietary basis of the population, combined with transportation difficulties, meant that arable farming was carried out even in the more remote dales. Although settlements were small, open field systems developed even in isolated locations such as
Were Dalehead and Buttermere. Such field systems were probably established at a relatively late date and were still expanding in the sixteenth century. Around the core of these open fields, as well as around isolated steadings and former shielings, the enclosure of land in severalty occurred. This produced a patchwork of small irregular closes of arable, pasture and meadow, detailed acre by acre in the Percy survey, interspersed with small areas of woodland. Encroachment from the common grazings was still proceeding as squatters or existing tenants improved small portions of land. At a later date the common fields themselves were enclosed into individual parcels, but the landscape of the Lake District and its settlement pattern had evolved so that it had many features in common with the one which can be seen at the present day.

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Poisson regression analysis and migration fields: the example of the apprenticeship records of Edinburgh in the seventeenth and eighteenth centuries

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ABSTRACT
This paper examines changes in the patterns of apprenticeship migration to Edinburgh between 1675 and 1799. The technique of Poisson regression is used to analyze how the amount of migration from burghs and counties within Scotland was related to their populations and distances from the capital. It is found that the relationship between these variables was not constant throughout Scotland. Between the late seventeenth and late eighteenth centuries a contraction of the migration field occurred. The contraction was greater to the west and south of Edinburgh than to the north. This is interpreted as a reflection of the growth of other towns which provided alternative sources of apprenticeships, of differences in the ease of movement and the economic linkages. It is also found that the variations between sectors were more pronounced at a county scale than at a burgh scale, and it is suggested that this was a function of greater differences between the former in the structure of their economies and the diffusion of information about potential apprenticeships. By incorporating sectoral and intervening opportunity variables acceptable Poisson regression models of the migration flows are identified, and it is concluded that there is considerable potential for applying similar techniques to other historical migration data.

KEY WORDS: Migration, Apprentices, Edinburgh, Regression, Count data, Poisson distribution.

Recent research has demonstrated the importance of in-migration in maintaining the populations of early-modern towns and allowing urban growth in the face of high mortality rates. A number of documentary sources provide information on urban immigration for the pre-industrial period but the most widely used has been apprenticeship records. While apprenticeship migration cannot be accepted as a surrogate for all migration into early-modern towns it has been suggested that it may be representative of the movement of single people aged between about 15 and 25 who comprised the most geographically mobile section of the population at this time.

To date most research on patterns of migration to pre-industrial towns has followed classic studies such as those of Zipf and Hägerstrand in emphasizing the importance of distance as a constraint on migration, and in some cases simple gravity models, such as those proposed by Olsson have been used to represent the amount of migration between two areas as a direct function of their populations and inversely related to the distance between them. Little use has, however, been made of the more sophisticated multivariate techniques, including regression, which have been applied to migration patterns in more recent times. This is unfortunate because such methods could help to identify and explain discontinuities within the migration fields of early-modern towns which cannot be attributed solely to variables such as distance and population but may have been caused by socio-economic factors such as the existence of intervening opportunities as discussed by Stouffer.

Previous work using apprenticeship records is no exception to this and has focused either on patterns of movement into individual towns during relatively short periods or has examined changes in the areas...
from which they drew their apprentices (their migration fields) at a very generalized level. Such research has identified the origins of migrants at a regional or at best a county level and has usually expressed flows between areas simply as percentages of the total amount of movement within a specified period. In only one study, that by Patten on apprentice migration to Norwich, Ipswich and Great Yarmouth, has the size of the flow from each area been related to its population and even this comparison was confined to East Anglia so that the more distant parts of the migration field were excluded. There has consequently been little detailed examination of the factors influencing the extent and dynamics of the migration fields for apprentices in early-modern towns or, for that matter, other socio-economic groups. The aim of the study is to examine the development of the apprentice in-migration field of one city, Edinburgh, during the seventeenth and eighteenth centuries and to assess the factors that influenced this using the technique of Poisson regression.

DATA AND HYPOTHESES

Scotland provides an interesting context for the study of urban in-migration patterns during the seventeenth and eighteenth centuries. Scottish towns were small compared with their English counterparts and the country was not dominated in economic or demographic terms by its capital to the same extent as England. In the late seventeenth century Edinburgh, with a population of in excess of 30,000 was little more than twice the size of Glasgow; and by 1801 Glasgow had overtaken the capital with a population of 77,500 against 67,000 for Edinburgh. Nevertheless, while Edinburgh was comparable in size with larger English provincial towns like Norwich for much of the period under consideration, the city possessed high-level functions which widened its migration fields. The presence of the Scottish court until 1603, and the Scottish Parliament and Privy Council until 1707 gave Edinburgh international status. Although Edinburgh ceased to be a seat of government in 1707 the continued presence of central functions including the court of Session, the Register of Sasines for recording land transactions, and the General Assembly of the Church of Scotland, maintained its national significance. The city also continued to act as a prominent social and cultural centre, many Scottish landowners having town houses there. As a result, Edinburgh recruited apprentices from a much wider area than English provincial towns. A study of Edinburgh allows the examination of apprenticeship migration to a capital at a level of detail which would cause practical difficulties for larger centres and provides an example of the effect of the development of intervening opportunities on an in-migration field with the rapid growth of trading centres and, later in the eighteenth century, industrial activities, in the west of Scotland, notably around Glasgow.

Data on apprenticeship migration to Edinburgh between 1583 and 1800 were extracted from the apprenticeship registers published by the Scottish Record Society. The format of these registers is similar to those for English towns. For each record the name of the apprentice, that of his father, the father’s occupation and domicile, the name of the master to whom the boy was bound, the master’s trade and the date of entry are usually given. The registers cover only the royal burgh of Edinburgh, a smaller entity than the city itself which also included the contiguous but administratively separate burghs of Canongate, and Portsburgh, a suburb on the southern side, erected into a burgh of barony in 1649 but controlled by the burgh of Edinburgh.

For the period between 1583 and 1800 the registers contain over 15,000 records of apprentices entering the merchant guild and the various trades guilds. Of the latter the butchers (bakers), cordwainers (shoemakers), goldsmiths, harners (metal workers), tailors, weavers and wrights were among the most prominent. The records were processed using the FAMULUS bibliographical package to facilitate data sorting and handling. Migrant apprentices were defined as those originating outside the city which was taken to include Canongate, Portsburgh and other contiguous suburbs. Until the eighteenth century migrants comprised over 70 per cent of the apprentices registered annually but this figure fell to around 50 per cent in the last quarter of the century. The registers are not, however, a complete record of the enrolment of craftsmen into the city’s trades. The sons of existing merchants and craftsmen attained burgess-ship without a formal apprenticeship and were not listed, while many non-burgess tradesmen operated illegally in the suburbs. In addition, during the eighteenth century the apprenticeship system declined. The proportion of people entering traditional trades by means of formal apprenticeships fell, and many new
occupations developed outside the old guild framework. Nevertheless, the registers still provide the most coherent body of documentation on the movement of young male migrants into the city's major trades. Indications are that the decline of the apprenticeship system did not start to affect apprenticeship migration patterns before the end of the eighteenth century.

The precise form of the analysis of the apprenticeship migration field was determined largely by the availability of other data which could be used to evaluate particular hypotheses. As has already been mentioned, previous studies of apprenticeship migration have found it difficult to relate individual flows to population data and in the context of Scotland in the seventeenth and eighteenth centuries there are only three suitable sources. The first of these is the hearth tax returns for 1691. These are incomplete for parts of the Highlands and southwest, but are otherwise comprehensive enough to make their use worthwhile. The second source is Webster's 1755 census, based on returns from parish clergy, which has been accepted as reasonably accurate and the third is the 1801 census.

One major advantage of these returns and censuses is that they are sufficiently detailed to enable population totals to be calculated for both counties and burghs. This means that it is possible to compare levels of apprentice out-migration and total population at a spatial scale which has not been attempted before. Table I indicates that the first of these surveys occurred when the migration field was close to its maximum extent; that the second was taken when it was starting to contract, and that by the time of the third it was much smaller. It was decided therefore that the development of the migration field could be examined best through a comparative analysis of three cross sections for both counties and burghs. Each cross section was based around one of the population data sources and the origins of migrant apprentices registered during a 25-year time span were compared with the distribution of population near the end of the period. The hearth tax data were related to the numbers of apprentices originating from each county and burgh between 1675 and 1699 (a total of 1384 and 276 migrants respectively), the 1755 census totals to those for apprentices registered between 1725 and 1749 (588 and 152 migrants), and the 1801 data to migrant apprentices recorded for 1775 to 1799 (468 and 155 migrants). When the data are disaggregated between the 33 counties and 84 burghs studied they give substantial numbers of low counts making them particularly suitable for analysis using Poisson regression. Distances from Edinburgh to each burgh were measured in km on a straight-line basis, and those to each county were calculated by a method which has been used in studying apprenticeship migration to London. This involved calculating the average of the straight-line distance from the capital to the nearest and furthest points of each county.

On the basis of previous migration studies in general, and particularly those concerning the movement of labour in pre-industrial towns, it was expected that population and distance from Edinburgh would be important influences in determining the levels of migration from each county and burgh. On the other hand, it was also anticipated that other factors would modify migration patterns, imparting directional biases to the flows of apprentices and to take account of this several other hypotheses were formulated.

Previous research has suggested that long-distance migration into pre-industrial towns tended to concentrate into streams from areas with which the urban centres have strong trading and industrial links, and that these directional biases often persisted for long periods. In the case of Edinburgh it was appreciated that patronage links, especially between landed families and the city's merchant elite, who recruited a significant but steadily declining proportion of their apprentices from landed backgrounds during the seventeenth and eighteenth centuries, would introduce a spatial random element into the pattern. Nevertheless, it was expected that the influence of this would be relatively limited and it was hypothesized that while apprentices would have been drawn to the capital from every part of

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<th>Period</th>
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<td>1583-1599</td>
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<td>1600-1624</td>
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Scotland migration flows would have been markedly greater from some areas than others. As a regional centre Edinburgh dominated south-east Scotland. The Lothians and Borders contained few other large urban centres and it was therefore expected that Edinburgh would have recruited a high proportion of apprentices from this area relative to population levels and distance from the city.

Edinburgh was also a focus for the coastal trade of eastern Scotland in the seventeenth and eighteenth centuries. The city was a major consumption centre for agricultural produce and, through the port of Leith, Scotland’s premier export outlet for grain. By the late seventeenth century the hinterland from which the city drew grain supplies had expanded to the Moray Firth and beyond. It was hypothesized that links generated through coastal trading would be reflected in strong flows of apprentices from east-coast areas in general, and the lightly urbanized north east in particular. On the other hand, Fife and the area round the Firth of Tay had a dense concentration of burghs and it seemed likely that these would have diverted many prospective apprentices from Fife, Forfarshire and adjacent counties.

Another probable influence on the pattern of apprenticeship migration to Edinburgh was the predominance of Gaelic language and culture in parts of Scotland. Throughout the period under study Gaelic was the normal speech throughout the western and northern Highlands and also in parts of the counties of Dunbarton, Perth, Aberdeen, Banff, Moray and Nairn. Given the marked cultural, social and economic contrasts between such areas and Edinburgh it was thought likely that levels of migration between the two would have been low during the seventeenth and first half of the eighteenth centuries. During the late eighteenth century, however, the population of the Highlands began to increase rapidly and its economy became more closely integrated with the rest of Scotland. It was considered that this would have led to a rise in apprenticeship migration to Edinburgh.

Because of the difficult passage through the Pentland Firth and the Minch the coastal trade of western Scotland operated almost independently of that along the east coast until well into the eighteenth century. As a consequence of this, and the greater difficulty of overland communication, it was considered that Edinburgh would have had less contact with western and south-western Scotland than with areas of eastern Scotland at a comparable distance, and that this would have reduced the flows of migrant apprentices from these areas. In addition, it was hypothesized that the rapid growth of Glasgow and other industrial centres in the western Lowlands during the eighteenth century would have created more apprenticeship opportunities and so further reduced migration to Edinburgh from these areas.

POISSON REGRESSION

Many previous studies of migration have used multiple regression techniques as a means of summarizing patterns and evaluating hypotheses. These are appropriate in situations where the values of one variable are considered to be dependent on those of two or more others and allow the researcher to assess the effect on the dependent variable of changes in each independent one whilst holding the others constant.

The type of regression most commonly used in studies of migration is that known as Ordinary Least Squares (hereafter referred to as OLS). In this the predicted value of the dependent variable is given by the equation:

$$\hat{y}_i = \beta_0 + \sum_{j=1}^{k} \beta_j x_{ij}$$

where $y_i$ is the predicted value of $y$ in case $i$, $k$ is the number of independent variables; $x_{ij}$ is the value of the $i$th observation on the $j$th independent variable; $\beta_0$ is the intercept; the value of $\hat{y}$ when each independent variable equals zero; and $\beta_j$ is the amount by which $\hat{y}$ changes when the value of the $j$th independent variable increases by one unit and those of the others are held constant. The observed value $y_i$ of the dependent variable can be envisaged as realization of a random variable $Y_i$ whose mean is estimated to be $y_i$. In OLS regression the $Y$ variables are assumed to have continuous normal distributions and a constant variance, and the difference between $y_i$ and $\hat{y}_i$ as measured by the coefficient of determination is used to indicate the goodness of fit of the regression model.

Ordinary Least Squares regression is, however, an inappropriate technique in situations where the dependent variable consists of counts. This is because the characteristics of such data are markedly different from those assumed by OLS regression. The values of counts can only be non-negative integers and therefore the corresponding random variables must be discrete and are also likely to be
Poisson regression analysis and migration fields

non-Normal and have different variances. These characteristics are particularly pronounced if the size of the counts is small and this is certainly true for the apprenticeship data since 58.3 per cent of the observations for counties and 94.6 per cent of those for burghs were counts of less than ten. It was therefore decided that it would be best to use a type of regression in which the Y variables are assumed to have discrete distributions and one of these is Poisson regression.

A Poisson distribution has a variance equal to its mean and represents the outcome of a discrete probability process of the form:

$$Pr(N) = \frac{e^{-k} k^N}{N!}$$

Where \(Pr(N)\) is the probability of \(N\) occurrences; \(\lambda\) is the average number of occurrences; and \(e\) is a constant (approximately 2.7183). In Poisson regression the random variable \(Y_i\) is assumed to have a Poisson distribution and its estimated mean \(\hat{\lambda}_i\) is equal to the predicted value of the dependent variable in that particular case. The difference between the observed and the predicted values of the dependent variable is therefore evaluated in terms of the probability under a Poisson distribution of a value of \(Y_i\) being equal to \(y_i\). The estimated mean \(\hat{\lambda}_i\) is assumed to be logarithmically linked to a linear combination of the independent variables and so the equivalent form of equation (1) for a Poisson regression model is:

$$\hat{\lambda}_i = \exp(\beta_0 + \sum_{j=1}^{k} \beta_j x_{ij})$$

where \(\hat{\lambda}_i\) is the predicted value of the dependent variable in case \(i\).

One other characteristic of Poisson regression is that an iteratively reweighted least squares procedure is needed to estimate the regression parameters. This can be done by using a computer package such as GLIM (Generalized Linear Interactive Modelling) which has been developed by the Numerical Algorithms Group (NAG) and the Working Party on Statistical Computing of the Royal Statistical Society. In this package Poisson regression is only one of a range of options available to the researcher and it is implemented by specifying that the link between \(\hat{\lambda}_i\) and the corresponding linear sum of the effects of the independent variables is logarithmic and that the probability distribution of \(Y_i\) is Poisson. In GLIM the goodness of fit for Poisson regression model is measured by a statistic known as the deviance which is given by the equation:

$$d = 2 \left( \sum_{i=1}^{n} y_i \ln \left( \frac{y_i}{\hat{\lambda}_i} \right) \right)$$

where \(d\) is the deviance; \(y_i\) is the observed value of the dependent variable in case \(i\); and \(\hat{\lambda}_i\) is the predicted value of the dependent variable in case \(i\). This represents minus twice the difference in log-likelihood between the current model and one which predicts the observed data exactly.

The deviance has a value of zero if the regression model fits exactly and its upper limit depends on the nature of the data. If a model is true then the distribution of the deviance is similar to that of \(\chi^2\) and it is therefore possible to evaluate the adequacy of a model by comparing its deviance \(d\) to the critical value of \(\chi^2\) for the appropriate significance level and number of degrees of freedom (the number of observations minus the number of fitted parameters). A model can be considered adequate at the specified significance level if its deviance is less than the critical value.

There is, however, some doubt about the overall extent to which the distribution of the deviance approximates \(\chi^2\), and consequently it has been suggested that instead of relying on a single test it is also sensible to examine the changes in deviance as individual terms are added to, or removed from, a model. The significance of a term can be assessed by comparing the reduction in deviance that results from adding it to a model with the critical value of \(\chi^2\) for the corresponding loss of degrees of freedom and if the former is greater then the term can be considered significant as the specified confidence level. It is essential to appreciate, however, that the significance of a term is likely to vary according to the other constituents of the model when it is added and consequently it is important not to assess terms in a single sequence but instead to adopt a procedure in which there is a large element of assessment and checking. In the analysis that follows the strategy used was first to obtain a measure of the variation in the dependent variable around its mean by fitting a model containing a single intercept (known as a null model) and then to add incrementally only those terms which produced a significant reduction in deviance when included. Terms that were initially insignificant were re-tested as the models became...
more complex and checks were also carried on ratios of parameter estimates to standard errors to identify redundant terms.

ANALYSIS OF MIGRATION FROM COUNTIES

The factors influencing the pattern of apprenticeship migration to Edinburgh were examined first at a county scale. Because of the limited coverage of the hearth tax data it was only possible to analyse migration from 18 counties in the first cross section, but in the other two all 33 counties were considered. The initial Poisson regressions were carried out to determine if the amount of migration from each county was related to its total population and distance from Edinburgh. Graph plots against the dependent variable indicated that to attain approximately linear relationships both of the latter needed to be transformed, and therefore the natural logarithms of population (LP) and distance (LD) were fitted as independent variables.

The results of these regressions are given in Table II. These indicate that the logarithms of population and distance are both significant variables and that together they account for a substantial proportion of the variation in the dependent variable. The regression equations corresponding to the latter models are shown with standard errors of estimates in parentheses and support the hypothesis that the amount of apprenticeship migration to Edinburgh from a country was related positively to its population and negatively to its distance from the city. In all three cross-sections, however, the residual deviance is far greater than the critical value of $\chi^2$ for the corresponding number of degrees of freedom and therefore population and distance variables alone cannot be considered to provide adequate models of the migration fields.

To determine how these models could be improved the spatial patterns of the residuals were examined. These are illustrated in Figures 1–4 and confirm several of the hypotheses advanced previously. The migration field of Edinburgh did not remain static over time. In particular it is apparent that there was a sharp curtailment of migration from western counties as Glasgow grew in importance. Contact with western Scotland was surprisingly high in the late seventeenth century suggesting that this area’s comparative remoteness had little effect in diminishing the attractiveness of the capital. Despite steady growth during the later seventeenth century Glasgow does not appear to have affected Edinburgh’s apprenticeship recruitment from this area. A sharp contraction of the migration field is evident, however, during the eighteenth century,
FIGURES 1 to 4. Apprenticeship migration from counties.
and the analysis suggests that this is largely attributable to the growth of intervening opportunities offered by Glasgow and other expanding centres in the western Lowlands.

Edinburgh consistently received more migrants than expected from many counties in the Lothians and Borders. Nevertheless, a progressive weakening in the migration flow from parts of south and south-eastern Scotland is evident. This may be related in part to increasing contact with England during the eighteenth century, particularly to Tyneside whereby the later eighteenth century a high proportion of the keelman were of Scottish origin. It is also clear that to the north of the capital the more urbanized Tayside counties had lower levels of migration than predicted whereas the reverse was true for those around the Moray Firth. This accords with the hypothesis that east-coast trade would influence the migration pattern.

The hypothesized pattern of low levels of migration from Gaelic-speaking areas did not appear as clearly as expected. It is notable, however, that migration was limited from truly western counties like Argyll and Bute throughout the period though even here the size of the negative residuals fell markedly during the eighteenth century. The change in Perthshire's position from strongly negative residuals in the late seventeenth and mid eighteenth centuries to a strongly positive one in the later eighteenth century reflects the early integration of the Highland part of the county with the Lowland economy through the cattle trade, temporary migration and the developing textile industries. The positive residuals for Ross and Inverness are influenced by relatively high levels of apprenticeship migration from burghs around the Moray Firth. The large size of the county units for the Highlands makes more refined analysis impossible but the sharp contrast between the positive residuals for the partly Scots-speaking Caithness and the negative ones for the wholly Gaelic-speaking Sutherland (a county with few burghs and only a narrow east-coast lowland strip) is striking, suggesting that analysis at a sub-county level would pick out more marked contrasts within the Highlands, particularly higher levels of apprenticeship migration from southern and eastern areas compared with the far north-west and the Hebrides.

In an attempt to incorporate some of these characteristics it was decided to experiment with adding two other variables to the models. The first of these was a measure of the degree of urbanization (U) in each county and was based on the percentage of county hearths within burghs for the first time period and that of county population in burghs for the other two. A sectoral classification (S) was used as the second variable and each county was assigned to a category according to whether it fell within the northern, western or southern sectors delineated in Figure 4.

The results of adding these variables to the existing models are given in Table III. These indicate that in all three cases the effect of adding the urbanization and sector variables was to produce significant reductions in the deviance. Because the sector variable (S) was categorical it was also possible to assess the effect of including interactions between S and the other three independent variables. This meant, for example, that it was possible to examine whether distance had a different effect in each sector. Each of the interactions was equivalent to fitting separate parameters for each independent variable in each sector and Table III shows that all of these are significant.

All the final models contain the same terms and have deviances which are sufficiently low that the null hypothesis of no difference between the observed and predicted values of the dependent variable cannot be rejected at the 0.05 significance level. The regression equations corresponding to these models are given on the right hand side of Table III. Because all the possible interactions are significant there is a separate regression equation for each sector in each time period, a total of nine in all.

Of the 36 regression parameters 28 have estimates which are significantly different from zero at the 0.05 significance level. The signs of these parameters are largely as hypothesized, although only four of those for the urbanization variable are negative. It is worth noting, however, that three of the remaining five are among the insignificant parameters and therefore it would be unwise to place great emphasis on this discrepancy.

In general the trends in the value of the parameter estimates accord with what would be expected from the previous models and their residuals. The intercepts indicate that in each cross-section counties in the southern sector had the highest levels of apprenticeship out-migration relative to their population, distance and urbanization characteristics, while the reverse was generally true for those in the western one. These latter counties do, however, have the highest parameters in each cross-section for the population variable whereas those for the southern
produce acceptable models of the characteristics of migrant apprentices and the distribution of population in the western sector than the southern one. It is also apparent that although most of the distance parameters become more negative over time the increase is largest in the western and southern sectors. This supports the hypothesis that the contraction in the extent of Edinburgh’s in-migration field was not uniform.

The above results indicate that it is possible to produce acceptable models of the characteristics of the three migration fields by dividing the country into three sectors and incorporating an urbanization variable as a crude measure of the distribution of alternative sources of apprenticeships. This implies that Edinburgh’s apprenticeship migration field developed unevenly during the seventeenth and eighteenth centuries with the contraction being greatest where there were intervening opportunities to divert potential apprentices. To the north of the capital, however, the situation was slightly different because Edinburgh’s coastal grain trade by-passed the Tayside burghs and therefore there was a larger

---

### TABLE III: Results of subsequent Poisson regression analyses of county data

<table>
<thead>
<tr>
<th>Model</th>
<th>Goodness of fit deviations</th>
<th>df</th>
<th>Sector</th>
<th>Regression equation of final model</th>
</tr>
</thead>
<tbody>
<tr>
<td>1675–99</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LP + LD</td>
<td>2 I 0.9</td>
<td>15</td>
<td>North</td>
<td>( \hat{\lambda} = \exp (1.36 + 0.913 \text{LP} - 0.748 \text{LD} + 0.005 \text{U}) )</td>
</tr>
<tr>
<td>+ U</td>
<td>1 10.5</td>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ S</td>
<td>3 7.1</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ SLP</td>
<td>2 8.3</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ SU</td>
<td>2 3 3</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ SDL</td>
<td>1 2 3</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of null deviance explained</td>
<td>98.93</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1725–49</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LP + LD</td>
<td>1 03 8</td>
<td>30</td>
<td>North</td>
<td>( \hat{\lambda} = \exp (-10.60 + 1.340 \text{LP} - 0.481 \text{LD} + 0.039 \text{U}) )</td>
</tr>
<tr>
<td>+ U</td>
<td>9 19.9</td>
<td>29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ S</td>
<td>5 9.4</td>
<td>27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ SDL</td>
<td>4 4.2</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ SLP</td>
<td>3 5.9</td>
<td>23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ SU</td>
<td>2 2.6</td>
<td>21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of null deviance explained</td>
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<tr>
<td>1775–99</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LP + LD</td>
<td>1 5 9 2</td>
<td>30</td>
<td>North</td>
<td>( \hat{\lambda} = \exp (1.023 + 1.032 \text{LP} - 1.949 \text{LD} - 0.026 \text{U}) )</td>
</tr>
<tr>
<td>+ U</td>
<td>9 1.9</td>
<td>29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ S</td>
<td>8 0.9</td>
<td>27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ SDL</td>
<td>5 1.8</td>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ SLP</td>
<td>4 2.1</td>
<td>23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+ SU</td>
<td>2 2.6</td>
<td>21</td>
<td></td>
<td></td>
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<tr>
<td>% of null deviance explained</td>
<td>97.58</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: LP = Natural Logarithm of population
LD = Natural Logarithm of distance
U = Urbanization
S = Sectoral classification
flow of migrants from Aberdeen and around the Moray Firth than would otherwise have been the case.

**ANALYSIS OF MIGRATION FROM BURGHS.**

To complement the analysis at the county scale migration from burghs alone was also examined for each of the three cross-sections. This level of study has the advantages that the difficulties caused by units of variable size are eliminated and distances can be measured more precisely because of the (virtually) point locations involved. It also allows a more detailed examination of the effects of intervening opportunities on Edinburgh’s migration field because it was other burghs that provided most of the alternative sources of apprenticeships.

The number of burghs examined in each cross-section was again dependent on the availability and format of population data. In the first cross-section it was only possible to consider 60 burghs but in the latter two coverage was more extensive, involving 84 and 81 burghs respectively. In a similar manner to the county analysis logarithmic transformations of burgh population and distance from Edinburgh were used, and the initial Poisson regression were carried out to examine the relationships between these independent variables and the amount of apprenticeship migration from each burgh.

The results of these regressions are given in Table IV. These are similar to the initial county results in that the independent variables are individually significant and the models in which both are included again have deviances higher than the relevant critical values of $\chi^2$ so that the null hypothesis can be rejected. It is worth noting, however, that these models are far closer to being acceptable than the equivalent ones were for the counties. The regression equations corresponding to the models are shown alongside the deviance tables, and they suggest that the amount of apprenticeship migration from a burgh was related positively to its population and negatively to its distance from Edinburgh.

In an attempt to improve these models the spatial patterns of the residuals were examined. These are illustrated in Figures 5–8 and largely correspond to those shown for the counties in Figures 1–3. One interesting difference, however, is that in Figures 5–6 the residuals for burghs in western and southwestern Scotland are not as strongly negative as might have been expected from the county results. This suggests that potential apprentices from the burghs were more likely to migrate to Edinburgh than their rural counterparts. Possibly this was due

<table>
<thead>
<tr>
<th>Model</th>
<th>Goodness of fit</th>
<th>Regression equation of final model</th>
</tr>
</thead>
<tbody>
<tr>
<td>1675–99</td>
<td></td>
<td>( \hat{\lambda}_i = \exp (-2.846 + 0.892 \text{ LP}_i - 0.445 \text{ LD}_i) )</td>
</tr>
<tr>
<td>Null</td>
<td>305.5</td>
<td>% of null deviance explained = -69.10</td>
</tr>
<tr>
<td>LP</td>
<td>182.9</td>
<td>(0.01) (0.01) (0.006)</td>
</tr>
<tr>
<td>LD</td>
<td>210.2</td>
<td></td>
</tr>
<tr>
<td>LP + LD</td>
<td>122.3</td>
<td></td>
</tr>
<tr>
<td>1725–49</td>
<td></td>
<td>( \hat{\lambda}_i = \exp (-0.373 + 0.465 \text{ LP}_i - 0.718 \text{ LD}_i) )</td>
</tr>
<tr>
<td>Null</td>
<td>265.0</td>
<td>% of null deviance explained = 52.34</td>
</tr>
<tr>
<td>LP</td>
<td>226.8</td>
<td></td>
</tr>
<tr>
<td>LD</td>
<td>214.8</td>
<td></td>
</tr>
<tr>
<td>LP + LD</td>
<td>126.3</td>
<td></td>
</tr>
<tr>
<td>1775–99</td>
<td></td>
<td>( \hat{\lambda}_i = \exp (0.405 + 0.496 \text{ LP}_i - 1.122 \text{ LD}_i) )</td>
</tr>
<tr>
<td>Null</td>
<td>499.4</td>
<td>% of null deviance explained = 74.69</td>
</tr>
<tr>
<td>LP</td>
<td>421.4</td>
<td></td>
</tr>
<tr>
<td>LD</td>
<td>156.3</td>
<td></td>
</tr>
<tr>
<td>LP + LD</td>
<td>126.4</td>
<td></td>
</tr>
</tbody>
</table>

Notes: LP = Natural Logarithm of population
LD = Natural Logarithm of distance

TABLE IV. Results of initial Poisson analyses of burgh data
FIGURES 5 to 8. Apprenticeship migration from burghs
to a greater knowledge of opportunities available in the capital generated by closer economic linkages.\textsuperscript{44} It could also have been linked to a decline in the proportion of Edinburgh apprentices drawn from the laird class, or smaller landowners, a group which was particularly numerous in the western and south-western parts of Lowland Scotland.\textsuperscript{45}

It was also expected that levels of apprenticeship migration from royal burghs would have been higher than from burghs of barony and regality because of the former group’s trading privileges and contacts between the merchant elites of royal burghs and the capital generated through trading links and meetings of the Convention of Royal Burghs.\textsuperscript{46} Nevertheless, no discernible contrast emerged in the analysis suggesting a marked contrast between theory and reality with regard to differences in the function of the two groups of burghs even in the late seventeenth century.

On the basis of these findings it was decided to experiment with adding three other variables to the models. Two of these were intended to be more precise measures of intervening opportunities, one being the percentage of the county population within the burghs (BP) and the other the ratio of the distance (RD) to the nearest large burgh to the distance to Edinburgh scaled according to the formula:

\[
RD = 100 - \left( \frac{\text{distance to nearest burgh} \times 100}{\text{distance to Edinburgh}} \right)
\]

It was hypothesized that the amount of migration from a burgh would be related positively to the value of BP and negatively to that of RD. The third variable was a sectoral classification defined in an identical manner to that used in the county analysis.

The results of adding these variables to the existing models are shown on the left hand side of Table V. These indicate that the intervening opportunities variables (BP and RD) are only significant in the last time period and that the impact of the sector variable (S) is less than it was in the county analysis. It is also apparent that fewer of the interactions between S and the other independent variables are significant and that the final models in each period are not identical but progressively more complex. Only in the third time period, however, is the deviance sufficiently low that the hypothesis of no difference between the observed and predicted values cannot be rejected at the 0.05 significance level. In some respects these results are less satisfactory than those for the counties, but it is worth noting that the burgh models are much simpler.

The regression equations for the final burgh models are listed in Table V. To facilitate comparisons with the county results they are presented as nine separate equations although many parameter values are common to all sectors in a cross-section. Of the 23 separate parameters 15 have estimates which are significantly different from zero at the 0.05 significance level. The signs of the parameters are largely as hypothesized but that for the burgh percentage of the county population (BP) in the third cross-section is negative rather than positive. This suggests that by the late eighteenth century some burghs may have been of a sufficient size for potential apprentices to be able to learn trades in their home towns, and therefore the lack of sizeable settlements in the rest of the county was not a factor encouraging migration to Edinburgh.

The fact that the models in each cross-section are different makes it more difficult to generalize about trends in parameter values, but it is also a matter of interest in its own right. In particular, the insignificance of the BP and RD variables in the first two cross-sections implies that intervening opportunities did not substantially affect apprenticeship migration patterns from burghs until the mid-eighteenth century. This interpretation is also supported by the values of the distance parameters; although they became generally more negative over time the increase is largest in the western sector where urban development was greatest and virtually minimal in the northern one. Despite this difference in distance parameter values, however, a major contrast between the county and burgh results is that the sector variable (S) is far more important in the former than the latter. This is reflected in Table V, by the small effects of adding the sector variable, the insignificance of many interactions and, compared to the county results, the slight differences between sectors in the values of their regression intercepts. The implication of these findings is that although the factors influencing apprenticeship migration from counties were substantially different between parts of Scotland the situation was more uniform with regard to burghs. This suggests that although there were directional variations in the extent of intervening opportunities and the ease of movement, the diffusion of information about apprenticeships in Edinburgh was perhaps relatively even throughout the burghs but differed in the degree to which it filtered into the surrounding rural areas. It is also
## TABLE V. Results of subsequent Poisson regression analyses of burgh data

<table>
<thead>
<tr>
<th>Model</th>
<th>Goodness of fit</th>
<th>Sector</th>
<th>Regression equation of final model</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>deviance (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1675–99</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LP + LD</td>
<td>122.3 57</td>
<td>North</td>
<td>$\hat{\lambda}_i = \exp \left( -3.714 + 0.884\text{LP}_i - 0.297\text{LD}_i \right)$</td>
</tr>
<tr>
<td>S</td>
<td>95.1 55</td>
<td></td>
<td>$\left(0.079\right)\left(0.010\right)\left(0.007\right)$</td>
</tr>
<tr>
<td>% of null deviance explained</td>
<td>68-99</td>
<td>West</td>
<td>$\hat{\lambda}_i = \exp \left( -3.426 + 0.884\text{LP}_i - 0.297\text{LD}_i \right)$</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$\left(0.083\right)\left(0.010\right)\left(0.007\right)$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>South</td>
<td>$\hat{\lambda}_i = \exp \left( -2.909 + 0.884\text{LP}_i - 0.297\text{LD}_i \right)$</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$\left(0.077\right)\left(0.010\right)\left(0.007\right)$</td>
</tr>
<tr>
<td>1725–49</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LP + LD</td>
<td>126.3 81</td>
<td>North</td>
<td>$\hat{\lambda}_i = \exp \left( -2.695 + 0.537\text{LP}_i - 0.337\text{LD}_i \right)$</td>
</tr>
<tr>
<td>S</td>
<td>118.4 79</td>
<td></td>
<td>$\left(1.110\right)\left(0.012\right)\left(0.115\right)$</td>
</tr>
<tr>
<td>% of null deviance explained</td>
<td>59-17</td>
<td>West</td>
<td>$\hat{\lambda}_i = \exp \left( -1.426 + 0.537\text{LP}_i - 1.334\text{LD}_i \right)$</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$\left(1.112\right)\left(0.012\right)\left(0.209\right)$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>South</td>
<td>$\hat{\lambda}_i = \exp \left( -1.003 + 0.537\text{LP}_i - 0.631\text{LD}_i \right)$</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$\left(1.171\right)\left(0.012\right)\left(0.110\right)$</td>
</tr>
<tr>
<td>1775–99</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>LP + LD</td>
<td>126.4 78</td>
<td>North</td>
<td>$\hat{\lambda}_i = \exp \left( -3.979 + 0.811\text{LP}_i - 0.373\text{LD}_i - 0.019\text{RD}_i - 0.057\text{BP}_i \right)$</td>
</tr>
<tr>
<td>S</td>
<td>118.4 77</td>
<td></td>
<td>$\left(2.421\right)\left(0.228\right)\left(0.224\right)\left(0.001\right)\left(0.002\right)$</td>
</tr>
<tr>
<td>% of null deviance explained</td>
<td>83-15</td>
<td>West</td>
<td>$\hat{\lambda}_i = \exp \left( 1.817 + 1.841\text{LP}_i - 2.530\text{LD}_i - 0.019\text{RD}_i - 0.057\text{BP}_i \right)$</td>
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<tr>
<td></td>
<td></td>
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<td>$\left(1.831\right)\left(0.338\right)\left(0.434\right)\left(0.001\right)\left(0.002\right)$</td>
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<td></td>
<td></td>
<td>South</td>
<td>$\hat{\lambda}_i = \exp \left( 5.811 + 0.103\text{LP}_i - 1.236\text{LD}_i - 0.019\text{RD}_i - 0.057\text{BP}_i \right)$</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$\left(3.283\right)\left(0.121\right)\left(0.193\right)\left(0.001\right)\left(0.002\right)$</td>
</tr>
</tbody>
</table>

Notes: LP = Natural Logarithm of population
LD = Natural Logarithm of distance
S = Sectoral classification
RD = Distance ratio
BP = Relative size of burgh population

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### KEY TO BURGHS

possible that the differences in the rural economies of various areas, particularly the scale of domestic industries such as textile manufacture, may have influenced levels of out-migration to a greater degree than occupational variations within the burghs.

The analysis indicates that other burghs did function as centres of intervening opportunity and that this influence on migration patterns intensified in the later eighteenth century when marked urban growth was occurring, particularly in west-central Scotland. There are also indications that levels of migration were sustained in the burghs when they were falling in surrounding rural areas. This may indicate differences both in levels of contact with the capital and in available information concerning opportunities there between urban and rural populations. Further work on patterns of recruitment into other Scottish towns would help to clarify this.

CONCLUSION

In conclusion, the pattern of apprenticeship migration to Edinburgh had many similarities with that of London, including nationwide recruitment and also a tendency for the migration field to contract over time. The Poisson regression models have shown that while apprentices were drawn to Edinburgh from all parts of Scotland during the seventeenth and eighteenth centuries the migration field of the city was far from being regular. Distance from the capital and the population of centres of origin were important variables in explaining levels of migration but the city's migration field contained clearly-defined flows from particular areas even after the effects of distance and population had been allowed for. Previous studies of movement into pre-industrial towns have not demonstrated such marked directional components in their migration fields. Patterns of relatively high and low levels of migration from particular regions, counties and burghs conformed broadly to those which had been hypothesized, reflecting the influence of factors such as communications and trading contacts, regional levels of urbanization and cultural differences. Some of these patterns persisted over long periods confirming Patten's suggestions regarding migration into pre-industrial English towns. Superimposed on these patterns were important evolutionary changes in the apprenticeship migration field of Edinburgh caused by the growth of other urban centres during the eighteenth century, notably Glasgow, providing increasing local opportunities for prospective apprentices. In this respect too apprenticeship migration to Edinburgh mirrors that to London though with a substantial time lag.

Some of the variation in migration in this case study was not explicable in terms of known socioeconomic variations and may relate to contacts generated between particular Edinburgh trades and burghs or rural areas with corresponding industrial specializations. Not enough is known about the distribution of such specializations to allow them to be included in the analysis. A preliminary study of the origins of mercantile and craft apprentices has shown, however, that the migration field of the former group was considerably wider than that of the latter one. There were also significant differences in the extent of the migration fields for apprentices entering different crafts. It is hoped that further work on the apprenticeship records will show to what degree different trades recruited from particular areas. Individual linkages between people in the capital and specific urban and landed families elsewhere may also have generated migratory linkages of a spatially random nature which would not be explicable in this type of analysis. Detailed studies of the backgrounds of individual migrants such as that by Clark for Kentish towns are necessary to explain contacts of this sort. Poisson regression is particularly suitable for analysing patterns of migration involving single, major migratory moves such as those associated with the taking up of apprenticeships, or marriage. Types of migration involving a series of stepwise moves, such as the movements of farm servants in England and Scotland may require a different treatment.

It must be admitted that the use of county units, some of which in Scotland were extremely large, inevitably blurs contrasts within the migration field which may reflect differences in agricultural geography and, during the later eighteenth century in particular, differing rates of agrarian change. It is intended to carry out further research using smaller areal units to attempt to identify regional and local contrasts in migration patterns more effectively. While the migration field of Edinburgh was distinctive in some respects on terms of its physical, economic, social and linguistic diversity, it is considered that similar techniques applied to migration data for urban and rural communities elsewhere will demonstrate equally high levels of diversity in migration flows and will help to explain some of these contrasts. Poisson regression analysis has considerable
potential in allowing a more rigorous analysis of many kinds of historical migration data than has previously been attempted.

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AGRICULTURE IN ABERDEENSHIRE IN THE SEVENTEENTH AND EARLY EIGHTEENTH CENTURIES: CONTINUITY AND CHANGE

IAN WHYTE

The traditional interpretation of the development of agriculture in Scotland has involved the idea of an Agricultural Revolution during the later eighteenth and early nineteenth centuries. This Revolution changed the face of the countryside and the character of rural society within the space of a couple of generations. In the North East it produced the highly commercialised rural landscape of large farms and peripheral crofts and the rural society of the ploughman and the bothy which continued up to and beyond the First World War. Pre-improvement agriculture was dismissed as uniformly inefficient and primitive, having scarcely advanced in techniques and productivity since medieval times. One reason for this interpretation was an undue reliance on descriptions of pre-improvement agriculture by eighteenth-century writers who included Archibald Grant of Monymusk, one of the first ‘Improvers’ in Aberdeenshire. The problem was that these men were propagandists with a vested interest in drawing unfavourable contrasts between contemporary farming practices and the new systems which they were trying to disseminate.

Such views have been modified by recent detailed studies of seventeenth-century estate documents. While this work has not identified a hitherto hidden ‘Agricultural Revolution’ in Scotland during the seventeenth century comparable to the one which has been claimed for England, it has shown that many aspects of agricultural change which had traditionally been ascribed to the eighteenth century began a century earlier. Seventeenth-century Scottish agriculture had not been stagnant; there had been changes in farming practices and in the organisation of farming society which paved the way for the more impressive and more widely-advertised changes of the era of Improvement. Such developments, nevertheless, took place against a background of underlying continuity in the basic character of farming and rural life.

This article pursues these complementary themes of continuity and change with regard to agriculture in Aberdeenshire.
during the seventeenth and early eighteenth centuries. One aim is to identify some of the distinctive features of the shire's farming systems during this period and how they varied from one region to another. In trying to pinpoint some of the ways in which farming changed during this century and some of the implications which these changes had for the future, it is necessary to consider influences such as rural social structure and farm and holding sizes, and to understand the nature of the relationship between landlord and tenant. It is important to stress, however, that our understanding of agriculture and rural society in Aberdeenshire during this period is still very imperfect. There is considerable scope for further research and some of the themes which may be capable of providing the answers, will be indicated.

Regional variations in farming within Aberdeenshire

Aberdeenshire is a very varied county in its topography and environmental conditions. This is reflected in marked contrasts in present-day farming within the county and it is likely that marked regional and local differences in farming patterns also existed in the past. It is no easy matter to pick out these variations from the sources. Estate papers, being concerned primarily with tenancy, rents and arrears, only shed light on this theme indirectly. The rents which farmers paid nevertheless provide some clues to geographical contrasts in agriculture. Farmers in more arable-oriented areas paid much of their rent in grain. Those in districts in which there was a balance between crop and livestock production paid rents in both grain and money, while those in the pastoral uplands frequently paid rent in money only. This allows us to divide the county into three general types of region (Figure 1, bottom right). At a more detailed scale contemporary topographic descriptions provide indications of variations in the rural economy at a parish level. Figure 1 shows this for one group of parishes based on statements made by one early eighteenth century writer. This is still a crude way of distinguishing different types of farming. There were doubtless important variations at a local scale too but nobody has yet tried to identify them. This could be done in many parts of Scotland by using the inventories of farmers' possessions, including crops and livestock, contained in the testaments which were lodged with local commissary courts. Detailed analysis of these provides a wealth of data on the rural economy in the seventeenth and eighteenth centuries but unfortunately
Figure 1 Farming regions in a group of Aberdeenshire parishes and in the shire as a whole, 17th and early 18th century
all the Registers of Testaments for the Aberdeen commissariat prior to 1715 were destroyed by fire.5

A general point about farming is that during the seventeenth and early eighteenth centuries crops were grown virtually everywhere in the county, even in remote upland glens. In such areas the amount of arable land was often very small, and the returns to the husbandman meagre, but at a time when cereals were a major element in most people’s diet it was vital to try and produce enough to meet the needs of the local population rather than rely on importing surplus grain from the lowlands—a source of supply which could dry up after a poor harvest. On the other hand even the areas which concentrated on cereal production always maintained a good deal of land in rough pasture for grazing. Given that animal manure was essential for maintaining soil fertility, and that fodder crops like turnips and sown grasses were not grown, much potentially cultivable land had to be maintained in pasture. If we were able to go back and look at the Aberdeenshire landscape in the seventeenth century our first reaction might be surprise at how much land was being kept out of cultivation as rough pasture, outfield in fallow, peat moss, and undrained bottom land. Infield-outfield farming was geared to an essentially pastoral economy.

Infield-outfield farming and crop rotations

The perception of arable farming in Aberdeenshire and more generally throughout Scotland during the pre-improvement period has been strongly influenced, directly or at second hand, by James Anderson who produced the county report on farming in Aberdeenshire for the Board of Agriculture in 1794,6 and by James Wilson who in 1902 wrote an article on old farming practices in the county.7 Wilson drew up a diagrammatic summary of a typical Scottish field system which, explicitly or otherwise, has formed the basis of most historians’ descriptions ever since. Wilson divided the arable land into two categories, infield and outfield. The former, on the best land, received most of the animal manure and other fertilizers and usually took up about a third of the arable area. It was cropped continuously with an unending rotation of a year of bere, a hardy form of barley, followed by two years of oats. Most of the outfield was under rough pasture at any time. It was divided into folds and faughs. The folds made up about a third of the outfield. Portions of it were manured by feeding livestock on it during the summer, then ploughed, and cropped with oats (without any further manure) until returns had fallen to such a low level that
further cultivation was abandoned and the land was left to recover for a few years. The faughs consisted of outfield which was periodically ploughed up and cropped for two or three years without any manure. Reading Wilson’s account it is clear that he was deliberately generalising and that there must have been considerable variation in cropping patterns within Scotland and, at a smaller scale, Aberdeenshire.

The kind of variations which are likely to have occurred include differences in the ratio of cultivated land to rough pasture, contrasts in the proportion of infield to outfield, and differences in farming practices such as crops, rotations and fertilizers. There are indications, naturally enough, that the amount of land in cultivation was greater in lowland districts, and that the proportion of infield was higher on the more fertile soils. Details of rotations and crop yields at this period are difficult to obtain; they may be mentioned in farm leases, and can sometimes be reconstructed from estate accounts which include information on the cultivation of the mains (‘home farm’) when it was under the direct management of the proprietor.

Estate papers and other sources show that in some respects cultivation practices in Aberdeenshire during the later seventeenth century were behind those in more advanced areas like the Lothians. For one thing, relatively little wheat was grown in the county. Wheat was the highest-priced cereal but was more demanding in its requirements than the hardier bere and oats. It is recorded among victual rents on some estates in the Garioch and around Aberdeen but it does not seem to have been a common crop. Legumes, especially peas, were also sometimes grown as a field crop. Aberdeenshire suffered from having virtually no local supplies of lime, the fertilizer which had produced a mini-revolution in arable farming in the Lothians during the early seventeenth century. There it had dramatically improved crop yields, allowing the expansion of more intensively cultivated infield at the expense of outfields, and encouraging the intake of new arable land from pasture. In the North East the limestones of Strathisla in Banffshire were being burnt with peat to produce agricultural lime in the later seventeenth century. However, although lime from this area was sometimes transported to the east coast of Aberdeenshire for use as mortar there is no record that it was ever brought in sufficient quantities for agricultural use. The only limestone outcrop in Aberdeenshire which was worked for this purpose was one near Strichen. Seaweed was widely used as a fertilizer in coastal areas, but inland districts had a very limited choice of fertilizers.
to supplement animal manure. It was probably for this reason that many Aberdeenshire farmers had adopted the pernicious practice of paring turf off the surface of pasture and even poorer arable land, and mixing it with manure to form a compost for their infields, sometimes applying 700 cartloads per acre. That this did no good to the land in the long term was widely appreciated. In 1683 for instance the baron court of Rubislaw forbade tenants to dig turf for making ‘muck middens’. In 1685 the Scottish parliament tackled the problem by passing an act to encourage the sowing of peas as an alternative way of improving the soil. Aberdeen-shire was specifically mentioned as an area where farmers commonly dug turf in this way. It is doubtful if sowing peas in the small quantities specified in the act would have had much effect but the national legislation was echoing the efforts of local proprietors, through their baron courts, to spread the use of legumes whose nitrogen-fixing properties were appreciated though not understood. In 1671 the Forbes baron court stipulated that every unit of land paying 100 merks or a chalder of meal in rent should have two pecks of peas sown on it. The burgh of Banff had passed a similar resolution relating to its lands in 1659. After 1685 baron courts could quote the parliamentary act to lend authority to their rulings, and they did so frequently. The small quantities of peas which they expected farmers to sow suggests, however, that they were often sown only on a few infield rigs rather than forming a full course as was common further south.

Aberdeenshire estate papers provide some examples of improved crop rotation. Rotations of bere/oats/peas rather than the traditional bere/oats/oats is recorded from some estates; so is the insertion of a fallow course into the unbroken succession of cereals on the infield. Where wheat was grown it was added to a rotation of bere and oats and, as it was regarded as an exhausting crop, it was preceded by either a fallow course or a crop of peas. The supposedly ‘typical’ rotations of bere followed by two crops of oats do occur but so do rotations with only one and as many as three crops of oats between bere. Outfield rotations are even less frequently recorded but examples show that three or four crops of oats were generally taken before the outfield was rested and that a fallow of four to five years was normal. The problem is, of course, that such reference are sporadic. They may not be representative and do not give us any idea of how much, or how little local variation occurred.
What yields did these rotations produce? Information on yields is as difficult to obtain as data on rotations. Generally one can only calculate them from the accounts of estate mains where the quantities of grain sown and harvested are given. However, Garden of Troup’s observation that infield yields in the north of the shire could go as high as five or six to one but were often closer to four to one is in line with information from other parts of Scotland. On outfield land the first crop after fallow might give as high as six or seven to one in exceptional cases. Such yields, while not spectacular, were at least an improvement on the break-even yield of three to one which is often assumed to have been normal.

A category of arable land which did not fit into the standard framework of infield-outfield farming was known as ‘burntland’. This resulted from the practice of ditching the surface of the ground around the edge of a peat moss, paring off the dried-out surface layer, piling it into heaps, burning it and sowing a crop in the ashes. The cropping of burntland was widespread in Aberdeenshire; its attraction was that yields of up to seventeen or twenty to one could be obtained because of the rich mineral content of the ash layer. Unfortunately, if the practice was long continued, it could lead to a shortage of peat as the moss gradually became burnt out. The court book of Leys in 1649 referred to scarcity of peat mosses on the estate due to the ‘great abuse of burning them and making bruntland’. The bailie recorded that henceforth tenants were not to cultivate any land in this manner without the express permission of the laird. In 1671 the factor at Belhelvie was recorded patrolling the proprietor’s peat mosses to check whether any tenants had been encroaching on them in this way.

Enclosure and improved farming

We should visualize Aberdeenshire farming at this time taking place in a landscape which was mainly open, unenclosed and treeless. Enclosures were confined to the policies surrounding the country houses of the landowners, and even here the scale was limited compared with more progressive parts of Scotland. From the mid seventeenth century a fashion had developed for rebuilding or extending old fortified houses and laying out more extensive policies around them. This trend had been encouraged by parliamentary legislation granting tax concessions on enclosed land for plantations of trees and also for agriculture. Activity was greatest in south east Scotland and also in Galloway where it was linked to the profitable cattle trade with
AGRICULTURE IN ABERDEENSHIRE

England. Late seventeenth and early eighteenth century descriptions of Aberdeenshire make only sporadic references to such enclosures, in contrast with neighbouring areas like Forfarshire. These references relate mainly to the planting of trees. Much of this was on a very small scale but at Kildrummy, for example, the planted timber in 1703 amounted to over 13,000 trees, limited compared with the millions of trees said to have been planted far later in the century for Sir Archibald Grant of Monymusk but nevertheless a significant development. Most of the lowlands of Aberdeenshire had been stripped of their woodlands long before the seventeenth century, and only the pine and birch woods at the head of the Dee remained. Even these were under threat. A factor's report to the earl of Mar in 1707 suggested that the value of the earl's pinewoods around Braemar had risen because the woods of Glentanar, closer to the main centres of population, were being worked o'- due to large-scale felling and lack of replanting. Inadequate management by ordinary people, who cut green timber whenever they could, despite innumerable acts passed by baron courts, lay at the heart of the problem. Planting and enclosure had to go hand in hand because of the need to protect the young trees from livestock in an open landscape. Under the circumstances it was inevitable that the initiative came from the landowners and not their tenants. The planting of woods around country houses was done for ornamental purposes, but there was also an economic side to it; timber was valuable and represented a reserve of capital which could be drawn on if an estate came into financial difficulties. The later seventeenth century saw the birth of modern commercial forestry in Aberdeenshire. As early as the 1680s a start had been made in trying to encourage the tenantry to plant and protect trees. Leases on the Gordon estates at this time began to contain clauses requiring tenants to plant a certain number of trees each year on their farms — up to twenty — and protect them or face penalties.

Enclosures round country houses also allowed proprietors to experiment with new methods of farming before trying to disseminate them more widely. This was the course followed by Grant of Monymusk and other improvers in the first half of the eighteenth century. It is not clear whether Grant was the first Aberdeenshire landowner to introduce better rotations and new crops such as sown grasses and turnips. He may merely have got the credit for it. Certainly, the accounts for a number of estates in the county show that in the late seventeenth century their parks and mains were being managed with increasing attention.
to efficiency. At Gordon Castle large numbers of cattle were bought from the tenants and fattened on the controlled and protected grazing within the castle's parks. The pace of progress, even in the eighteenth century, was indubitably slow and it took a long time for enclosure to spread beyond the mains to the tenants' farms. This was partly due to lack of capital investment by landlords and tenant alike. However, so much of the credit for initiating agricultural improvement has traditionally gone to the landowners that it is easy to underestimate the contribution of the ordinary farmers. Much of the enclosure on the Monymusk estates, for example, was not done by hired labourers working for Grant himself, but by his tenants, who received a reduction in rent but did the work themselves, and must presumably have been sufficiently enthusiastic about it to take leases offered on these terms. The Military Survey of 1747-55 shows how little enclosure had been achieved by the middle of the eighteenth century. Nevertheless, a start had been made in preparing the rural population for the changes to come. From the 1680s tacks on the Gordon estates began to include clauses stipulating that tenants were to be compensated for any improvements such as ditching and dyke making which they carried out. This does not, of course, prove that they actually undertook improvements but it did remove one obstacle to their doing so, namely the fear that any such efforts would bring no benefit to the tenant if he removed at the end of a short lease.

Market centres
In the seventeenth century Aberdeenshire was not highly urbanised compared with areas further south. Indeed, although Aberdeen was one of the largest regional centres in Scotland, the North East was poorly provided with smaller burghs possessing a wide range of crafts and services. The poll tax lists of 1696 show that only Fraserburgh and Peterhead were large enough to act as major sub-regional centres. Old royal burghs like Inverurie and Kintore were very small and were barely distinguishable in size or function from the rural kirktouns. Figure 2 shows the distribution of market centres within the county in 1600 — assuming that all the baronial burghs which had been authorised by parliament were actually functioning. It also shows those areas which were within easy range of existing centres. The distance bands are arbitrary but they do show that much of Buchan and large areas in the west of the county were distant from market centres.
Figure 2: Market centres in Aberdeenshire in the 17th and early 18th centuries
During the seventeenth century many new market centres were authorised in Aberdeenshire as elsewhere in Scotland. Some were new burghs of barony but after 1660 new centres, authorised to hold markets and fairs but without burgh status were created (Figure 2). The establishment of these new centres reflects a move away from the medieval system of burghal monopolies which was becoming restrictive and unworkable. It is difficult to know to what extent this rash of new foundations was designed to encourage the growth of local trade, or to cream off revenue from existing unofficial trade by creating more outlets where tolls could be charged.\(^{34}\) Overall, however, the provision of market centres was greatly improved during the later seventeenth century. Figure 2 shows that by 1707 the county was much more effectively served than a century earlier and that virtually no part of the county was more than sixteen kilometres from a market centre.

The initiative behind the establishment of these new market centres came not from central government but from local landowners. Although there was a pause between the authorisation of the last of these market centres in the early eighteenth century and the foundation of the first planned estate villages in the 1750s and 1760s, the latter were nonetheless a continuation of the earlier tradition, often on adjacent sites, modified to meet changing economic circumstances. The seventeenth century market centres were designed to improve trade; fostering domestic industry was a secondary consideration. Many of the planned villages were designed to promote linen and woollen manufacturing but they often acted as local service centres too.\(^{35}\)

The new market centres of the seventeenth century did not usually require any great outlay of capital by the landowners who promoted them, particularly the non-burghal ones where markets and fairs were generally attached to existing kirktouns, requiring no more facilities than a suitable piece of open ground. Some landowners did invest capital in their new foundations; this was particularly the case with coastal burghs of barony like Fraserburgh, where Sir Alexander Fraser of Philorth had to provide breakwaters to create a safe harbour and encourage trade.\(^{36}\)

Trade

While Aberdeenshire farming at this period cannot be considered as highly commercialised, the marked regional variations in agriculture within the county generated trade of necessity. In every area the inhabitants tried to produce as much of their
basic needs as possible but complete self-sufficiency was rarely possible. The uplands were perennially short of grain, the lowlands looked to the hills for their horses, cattle and oxen. The burghs, especially Aberdeen, required a steady flow of agricultural produce from their surrounding hinterlands to sustain their populations. In addition the county regularly produced agricultural surpluses for sale outside the region. The surpluses produced by individual tenants after they had paid their rents and set aside their requirements for food and seed were often limited. Their involvement in trade was strictly small scale, through local market centres. Most of the bulk trade was in the hands of the landowners who received large quantities of grain and other produce in rents. Aberdeenshire was not as large an exporter of grain as some parts of eastern Scotland. The port books for the customs precinct centred on Aberdeen show, for instance, that in the bumper harvest year of 1684-5 the Aberdeen precinct came only eighth, exporting barely a sixth as much grain as the Montrose and Dundee precincts.\textsuperscript{37} One reason for this may have been that much of lowland Aberdeenshire's surplus of grain was traded into the Highlands which were always short of cereals. The accounts for the Gordon estates around Huntly in the late seventeenth and early eighteenth centuries show that large quantities of grain were regularly sold to 'the men of Badenoch'.\textsuperscript{38}

Much of the agricultural surplus of areas like Buchan left Aberdeen in the form of knitted hosiery and webs of coarse woollen plaiding, for which the town was Scotland's major exporter. In some Buchan parishes nearly a fifth of the adult males in the poll tax lists of 1696 were described as weavers\textsuperscript{39} (Figure 3). The cloth was bought by Aberdeen merchants who travelled from one local fair to another. The cattle trade was also flourishing in the late seventeenth century. Larger landowners could buy in lean stock and fatten them in their parks for resale. Tenants too could enter the trade on a small scale by buying in extra animals or by taking other farmers' livestock on to the summer pastures for a fee. A factor's report for the earl of Mar's estates on upper Deeside early in the eighteenth century showed that tenants and feuars of the earl were taking lowland cattle with their own animals to the summer shielings.\textsuperscript{40} These were becoming overstocked as a result and new shielings were being pushed higher into the earl's deer forests. Efforts to restrict this practice seem to have been unsuccessful and in some areas, like Glenrinnes, south east of Dufftown, the proprietors merely acquiesced to it and set about finding ways of
Textile Workers as a Percentage of Recorded Male Population

- 10 - 16
- 6 - 9
- 3 - 6
- 0 - 3
- No Data

Figure 3
extracting some of the profit from the tenants as extra rent.\(^{41}\)

Rent

An important element of continuity from the seventeenth century into the eighteenth was the form in which rents were paid. Most lowland tenants paid the main part of their rent in grain, generally ground oatmeal and bere. They were also liable for small payments of a variety of produce to maintain their landlord and his household. An old rental of the Lordship of Huntly in 1600 required that most of the tenants pay marts—cattle for slaughter and salting at Martinmas—as well as wethers, lambs, geese, ducks, grouse, hens, eggs, linen cloth, straw and loads of peat.\(^{42}\) Tenants in such areas often had to undertake labour services as well. These could include ploughing, harrowing, carting manure and harvesting on the mains, using their own animals and equipment. They also cut and carried peat for the landowner, and took their grain rents to market. The survival of such rents emphasises that although Aberdeenshire tenants were legally free men their relationship with their landlord still held an important element of feudalism. These antiquated rents had not been abolished and converted to money for two main reasons—the commercial element in the economy was not yet sufficiently strong for this to be a viable proposition, while at the same time the retention of these rents undoubtedly limited the tenants’ participation in the market economy and slowed the progress of more commercial attitudes. This explains why the bulk of the grain trade was in the landowners’ hands.

It was mainly in the upland and semi-upland areas that principal rents in money were found. The existence of money rents in these remote areas, furthest from the commercial influences of the burghs, might seem strange. It probably stemmed in part from the difficulties of farmers in such areas in discharging labour services when the proprietor’s castle or mansion was distant. Also, the pastoral products of such areas were more easily marketable, on the hoof in the case of livestock and as high value, low weight commodities like wool, instead of bulky grain.

There was some progress in the commutation of rents in kind to money payments during the seventeenth and early eighteenth centuries, but the pace of change was slow. Small payments in kind were often the first to go, as with more peaceful conditions landowners tended to reduce their households doing away with the large bodies of retainers they had
once accommodated, finding as a result that they had excess produce on their hands. There was less progress in converting grain rents to money partly because the existing system seemed to work well enough. Even at Monymusk Sir Archibald Grant only gradually reduced the victual rent, from 980 bolls in 1733 to 347 in 1767. Services too were only commuted slowly—at Monymusk Grant’s improving activities actually generated a greater demand for the carriage services of the tenants in hauling stone, lime and other commodities.

Farm and holding structures

The traditional idea of the Scottish pre-improvement farm is one in which a number of tenants (four, six, eight or sometimes more) held shares, working in cooperation. Their lands were intermingled in a system known as runrig which resulted from the need to divide the shares in a farm with strict regard to the quality as well as the quantity of land. This required that the best and worst land should be shared, producing fragmentation into scattered strips and blocks. The holdings worked by such tenants were generally too small to provide them with more than a bare subsistence. More detailed research has shown that while this view was not totally inaccurate, reality was more complex. This can be seen from the 1696 poll tax records and sets of estate rentals. These show that while multiple-tenant farms existed, large farms leased by single tenants and worked mainly by cottars, who sublet small portions of land, and by living in farm servants, were dominant in many areas. Farms of this kind accounted for 70% or more of all farms over much of Buchan, the Garioch and the area around Aberdeen (Figure 4). By contrast, in the upper reaches of the Don and Dee, multiple-tenant farms with up to twelve joint farmers and few cottars or servants were usual. Why did such contrasts occur? In the uplands where only small areas were cultivated for subsistence and the main resources of a farm were its grazings, the inefficiencies resulting from multiple, fragmented occupancy of the limited areas of arable did not matter greatly. In the lowlands, however, where grain was the product which paid the rent, it was more efficient to work the arable land in larger units using hired labour. This is a simplification of course because one can find examples of neighbouring estates, with most of the farms on one in single-tenancy and on the other in multiple-tenancy, emphasising the importance of an individual landowner’s decision-making.

The implication is, nevertheless, that single-tenancy was
Figure 4. Percentage of single tenant farms per parish in Aberdeenshire 1696.
more commercially efficient for an arable-oriented farm provided that tenants could be found with the resources to stock the larger units. Where rentals from the sixteenth and early seventeenth century are available for comparison with late seventeenth century ones, the pattern is one of gradual reduction in the numbers of shares on multiple-tenant farms, with eventual consolidation to single-tenancy. This process was far from complete by the early eighteenth century, but the slow change towards a more efficient type of farm structure was important. Apart from indicating changes in landlord policy representing the first move towards a more commercial system, another factor behind this evolution may have been increasing prosperity among certain sectors of the tenantry allowing them to stock and work larger farms. In parts of Aberdeenshire this trend may have been linked to growing profits from the cattle trade.

These geographical contrasts, and gradual changes, in farm organisation, had important implications for the structure of rural society. In Strathdon and the upper Dee the rural population was not markedly differentiated. Tenants, mostly small ones, formed over 40% of the active population in some parishes in 1696. By contrast, in many lowland areas, where larger single-tenant farms dominated, the proportion of tenants in the active population was something under 10% (Figure 5). In parishes such as these rural society was becoming split into a smaller class of tenants who were becoming more distinctly separated in wealth and status from the growing body of cottars and farm servants. The trend towards creating fewer and larger holdings was, in the long term, one of the most important influences on rural society. Continuing through the eighteenth century it produced a class of more prosperous farmers who were able to take advantage of incentives to improvement offered by their landlord, and by the developing market economy, people who were able to invest capital and were willing to invest labour in enclosure and drainage. In this way we can see the evolution of the capitalist farmer of the nineteenth century starting in the seventeenth century. Over the same period an increasingly large proportion of the rural population became stuck within the cottar class with less chance of upward mobility. As holding consolidation increased it became harder to break into the tenantry from below, to raise the capital to stock a farm, unless you inherited. When the cottars became deprived of their small stakes in the land in the interests of greater farming efficiency, towards the end of the eighteenth century, they evolved into the landless group of wage-earning ploughmen and labourers.
Figure 5. Tenants as a proportion of the active rural population, Aberdeenshire, 1696.

<table>
<thead>
<tr>
<th>TENANTS AS % OF ACTIVE RURAL POPULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 14%</td>
</tr>
<tr>
<td>15 - 19%</td>
</tr>
<tr>
<td>20 - 29%</td>
</tr>
<tr>
<td>30 - 39%</td>
</tr>
<tr>
<td>40% &amp; over</td>
</tr>
<tr>
<td>no data</td>
</tr>
</tbody>
</table>

Legend:
- Light grey: 0 - 14%
- Light grey: 15 - 19%
- Medium grey: 20 - 29%
- Dark grey: 30 - 39%
- Black: 40% & over
- White: no data

0 - 15 km

AGRICULTURE IN ABERDEENSHIRE
who are so familiar in later times.

The tenant farmers were not necessarily a homogeneous group in the seventeenth and early eighteenth centuries however. Examination of estate rentals shows that in most areas there was a good deal of variation in holding sizes. But rentals and other sources rarely give the actual acreage of a holding: they may express size as a traditional assessment in ploughgates — the amount of land which a ploughteam, nominally of eight oxen, could keep in cultivation — or in other ways. The problem is to know how much land these assessments actually meant. A ploughgate in Aberdeenshire was often reckoned to extend to some eighty Scots acres but this included outfield as well as infield. Given that the outfield formed the greater proportion of the arable land and that much of it was in fallow at any time, a farm might only have half or less of its arable in cultivation in any year. Many farmers with half a ploughgate or less may have depended on under twenty acres of cropland to support them. A high proportion of tenants on many estates may then have been close to the margins of subsistence.

This is confirmed from the lists of rent arrears which are a perennial feature of estate accounts. After a bad year tenants who could not pay their rent would not necessarily be evicted. There was still a good deal of paternalism in landowners' attitudes, and more practically, there was little point in removing a tenant at a difficult time when there might be little hope of finding a more suitable man to take his place. As a result tenants often stayed put and accumulated a burden of debt. On farms where the rent was paid in grain the problem was exacerbated by the system of recording arrears as a money equivalent based on the high market prices of a year of shortage, possibly two or three times the normal level. Tenants then had to pay these off from the modest surpluses of good years when grain prices were low. Larger tenants were in a better position to clear such debt because their surpluses were larger and they had more flexibility in their operations.

The retention of this system shows clearly the lack of long-term planning and the pursuit of short-term expediency in landowners' thinking. Most holdings were probably rented too highly in relation to their productivity and as a result it was hard for farmers, especially small ones, to accumulate capital. This perpetuated the wide social gulf between landlord and tenant. Landlords were not averse to borrowing money from their tenants but ordinary farmers rarely accumulated enough money to acquire land on a permanent basis.
Pitmonie, Monymusk Estate, in the early nineteenth century. A largely unimproved farm (though a ‘new yard’ is indicated), with irregularly shaped fields, much of the arable land still divided into ‘runrig’ strips held by different tenants, with tenants’ houses grouped together to form a ‘farm loun’. 

The structure of fields and buildings, along with the limitations of agricultural improvements, rendered farmers vulnerable to the effects of bad harvests. This was graphically demonstrated during the famine of the later 1810s. We do not know the full story, but the tenant farmers were often left to their own devices, with little help or support from the landlord or the government. As a result, many farmhouses were abandoned, and some were even demolished, leaving only their foundations as a reminder of a time of hardship and struggle.

The farms of the area were often divided into ‘yard’ systems, with strips of land held by different tenants. The ‘runrig’ system, which divided the land into narrow strips, was common in the area, and it allowed tenants to share the costs of cultivation and the risks of poor harvests. However, this system also restricted the amount of land that could be farmed and made it difficult for tenants to improve their land.

The changes that took place in the area during the early nineteenth century were partly driven by the demand for food, which led to an increase in farming and a rise in the population. However, this growth was not always sustainable, and it put a strain on the resources of the area. The government and landlords played a role in trying to address these problems, but their efforts were often limited by the economic circumstances of the time.
The structure of rents and holdings, along with the limitations of agricultural techniques, rendered farmers vulnerable to the effects of bad harvests. This was graphically demonstrated during the famines of the later 1690s. We do not know the full story of this, the last great subsistence crisis to affect North Eastern Scotland, but parish registers, rentals and other sources provide some detail. There were major contrasts within Aberdeenshire in the effects of the famine. In lowland areas while tenants often built up spectacular levels of arrears they rarely starved. At Belhelvie, north of Aberdeen, the turnover of tenants during the famine years was actually lower than normal—presumably because there was nowhere better to go and the factor was unwilling to let tenants leave with a backlog of arrears. Mortality in Belhelvie parish during the crisis years rose substantially, but the casualties were the cottars and smallholders rather than the larger farmers.

The story was undoubtedly worse in the upland west of the county. It is here that we find examples of abandoned farms and starving tenants. In areas like the Cabrach tenants were dying of starvation in 1697 and 1698 and their holdings had not been let five years later. Around Huntly in 1705 inducements were being offered to people who would take on untenanted farms. Conditions were more serious in such areas because the crop failures were more disastrous in a marginal upland setting, and the bad weather also caused heavy livestock mortality. It is worth remembering though that this was the last real famine in the North East and that it was the only one in the century between 1650 and 1750. This in itself shows that at this period agriculture in Aberdeenshire was able to feed the population and provide a surplus for export except under exceptional circumstances.

It has only been possible to review here some aspects of farming in Aberdeenshire during the seventeenth and early eighteenth centuries. In this area gradual changes occurred in farming practices and farm organisation, against a background of continuity in the basic framework of agrarian life. Many of the measures taken by the first improvers in the mid eighteenth century had already been tried in the seventeenth, such as attempts to persuade tenants to plant trees, refrain from paring off turf for manure, sow legumes, and restrict the number of crops which they took from their outfields. It took more favourable economic conditions after the middle of the eighteenth century with growing population and rising standards of living leading to higher food prices for them to be fully adopted.
Nevertheless, many of the changes in the organisation of agriculture such as the reduction of multiple tenancies, and the commutation of rents in kind had begun in the seventeenth century and accelerated gradually through the eighteenth. In presenting this picture of the slowly changing character of Aberdeenshire farming the intention has been to highlight those aspects about which we know something and to pinpoint topics on which our knowledge is very incomplete in order to back up generalisations by detailed studies of particular communities at the scale of the estate or parish to see how the gradual changes which have been outlined here affected the ordinary people of the county.

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44 Ibid., 45.
45 Stuart, List of pollable persons.
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49 Ibid.
Commissary court testaments: a neglected source for Scottish local history

Ian D. Whyte & Kathleen A. Whyte

Within the last 30 years probate inventories have become one of the most highly valued sources for English local history. They contain information which can shed light on various aspects of past societies and their economies ranging from patterns of arable farming and livestock rearing to the level and nature of debt and credit in rural society.1 It has not often been appreciated that a comparable source exists north of the Border. Commissary Court Testaments, the Scottish equivalent of English probate inventories, have received little attention from historians in general and only a few attempts have been made to use them in regional and local studies.2 Nevertheless, they contain a wealth of detail on social and economic conditions, forming perhaps the greatest single body of untapped source material relating to Scottish life and society in the late sixteenth, the seventeenth and eighteenth centuries.

Commissary courts were set up in 1563 to replace the pre-Reformation church courts. They acted as courts of record, dealing particularly with testamentary matters. The original 15 Commissariat districts coincided approximately with the pre-Reformation dioceses but their number was eventually increased to 22.3 Each court kept a register of testaments within its own district but the register for the Edinburgh district was also open to receive testaments from all over Scotland and from Scots who had died overseas. The original manuscript testaments are preserved in the Scottish Record Office in Edinburgh in bound volumes or, in some cases, loose. No representative collections of testaments relating to particular areas have yet been published comparable with those for some parts of England,4 but the Scottish Record Society has published alphabetical indexes of the testaments for most Commissariat districts. For some districts the earliest testaments date from the late sixteenth century but for several of them testaments are rare or absent before the seventeenth century. The numbers of testaments surviving for most parts of Scotland,
excluding the Northern and Western Highlands, are considerable. For a comparatively remote area like Orkney, for instance, some 2000 have survived for the seventeenth century. This means that for small burghs or groups of rural parishes over most of Lowland Scotland enough testaments should be available to provide a reasonable sample for a detailed local study either on their own or in conjunction with other sources. Inevitably, testaments are biased towards the wealthier members of society; to the merchants, more substantial tradesmen and professional people in the towns, and to the landowners and larger farmers in the countryside. Nevertheless, they do survive for people in the lower strata of society; they exist in substantial numbers for cottars and smallholders and even for farm servants.

Testaments recorded the moveable possessions of the deceased person and their household along with the debts owing by and to them. In this respect they are superior to English probate inventories which generally only list the debts owing to the deceased, often incompletely. Some testaments include wills, allowing the inheritance strategies of different social groups to be studied, but these form only a small proportion of the total. Testaments were usually drawn up by the surviving spouse, or failing that some other close relative or friend. While the arithmetic of the valuations may be faulty sometimes, they seem to have been made with reasonable care. Crops and stored grain, for example, were valued using the annual county fairs prices. Under Scots law a widow was automatically entitled to a third of her deceased husband's estate and their children to another third. A duty of about 5 per cent — the 'quot' — was payable on the remaining third of the estate which was deemed to have belonged to the deceased personally, and could be bequeathed as they saw fit if a will had been made. Because of the existence of this duty one might expect under-valuation and under-recording of goods and possessions to have been commonplace but, as Shaw has indicated, there were counterbalancing influences which would have encouraged reasonable accuracy.

Court officers would have been familiar with local prices and also with the likely balance of assets between crops, livestock and personal possessions for individuals in particular social groups. The debts owing to the deceased are likely to have been carefully recorded as they could only be pursued at law to the value stated in the inventory. Equally, debts owing by the deceased are not likely to have been underestimated as they reduced the value of the estate on which duty was payable. In general terms the lists of possessions, assets and debts were probably a reasonable reflection of reality.

The main difference between testaments and English probate inventories is that the former are often less detailed. Testaments usually record crops fairly completely. For ones made between seed time and harvest the amount of seed which had been sown is normally given for each crop, with an estimation of the probable yield and the likely value of the harvest. Where the testament was made in winter the quantity of grain stored in the barn is given. Livestock are also carefully specified with young
animals being distinguished from adult ones. Testaments rarely provide details of farm implements though and only a small proportion, usually for wealthier people, give breakdown of household and personal possessions. Generally these are lumped together in a single valuation.

Despite these deficiencies testaments contain much detailed information. Ones for tenant farmers can be used to reconstruct regional and local variations in agriculture. They provide data on the crops which were grown, their acreages and yields, and the ratio of infield to outfield. The balance between arable and pastoral farming can be examined as well as specialisation within the livestock sector, in a similar way to work on probate inventories. The authors have already discussed their potential in this context.

Perhaps of even greater interest to local historians is the way in which samples of testaments can shed light on the distribution of wealth in society and on patterns of debt and credit. Because debts owed both by and to the testators are listed it is possible to make a detailed analysis of their financial position in a way which cannot usually be done for probate inventories. The potential of testaments for this kind of social study can be illustrated by a sample of 200 registered in the Brechin Commissary Court relating to the inhabitants of the Panmure estates in Forfarshire during the seventeenth century.

Scottish rural society at this period has often been portrayed as uniformly impoverished but the sample of testaments suggests that at Panmure considerable socio-economic variation occurred. The people whose testaments were studied were divided into seven categories (Table 1). Three of these consisted of tenants broadly grouped on the basis of the number of plough oxen which they owned. Where it was possible to check numbers of oxen against the area of arable land in cultivation estimated from summer inventories or from estate rentals there was a close relationship between the two so that the number of plough oxen is a good general measure of holding size. Cottars and smallholders held an acre or two of arable land, either sublet from a tenant or leased direct from the proprietor; they did not normally own any plough oxen. The category of servants included both domestic servants in Panmure House and farm servants.

Table 1 shows that most people within the farming community were involved in debt and credit to some degree. Various forms of credit existed. Rent arrears and unpaid servants' fees were an important element in the debts of most farmers. Money could also be lent on bond or by unsecured loan. Another source of credit was deferred payment for goods.
Table 1. Distribution of Debt and Credit Between Various Social Groups

<table>
<thead>
<tr>
<th>Social Group</th>
<th>Average Value of Farm Stock £ Scots</th>
<th>Average Value of Assets Excluding Farm Stock and Household Goods £ Scots</th>
<th>% With Assets</th>
<th>Average Debts £ Scots</th>
<th>% With Debts</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARGE TENANTS (20)</td>
<td>1575</td>
<td>785</td>
<td>62</td>
<td>824</td>
<td>92</td>
</tr>
<tr>
<td>16 or more oxen over 100 Scots acres arable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MEDIUM TENANTS (59)</td>
<td>940</td>
<td>395</td>
<td>50</td>
<td>200</td>
<td>95</td>
</tr>
<tr>
<td>8-15 oxen 50-100 Scots acres arable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMALL TENANTS (39)</td>
<td>408</td>
<td>79</td>
<td>62</td>
<td>92</td>
<td>100</td>
</tr>
<tr>
<td>less than 8 oxen under 50 Scots acres arable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COTTARS, SMALLHOLDERS (44)</td>
<td>81</td>
<td>142</td>
<td>83</td>
<td>15</td>
<td>53</td>
</tr>
<tr>
<td>WIDOWS, SINGLE WOMEN (15)</td>
<td>-</td>
<td>343</td>
<td>90</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>ELDERLY and SINGLE MEN (17)</td>
<td>-</td>
<td>472</td>
<td>100</td>
<td>139</td>
<td>139</td>
</tr>
<tr>
<td>SERVANTS (6)</td>
<td>-</td>
<td>519</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>WHOLE SAMPLE (200)</td>
<td>-</td>
<td>294</td>
<td>69</td>
<td>307</td>
<td>70</td>
</tr>
</tbody>
</table>

Marked variations in the pattern of lending and borrowing occurred between different groups. Clearly some tenants had sufficient reserves to be able to loan money and those with larger holdings were sufficiently sophisticated to lend three quarters of it on bond. The contribution of individual small tenants to available credit was limited but this group was numerous and they may have been important in aggregate. The cottars seem an affluent group compared with the small tenants until it is appreciated that they had little capital invested in farm stock. As in England, widows, and elderly people were important providers of credit. Widows and single women, with more limited earning power than men, appear to have had a very businesslike attitude to providing credit, lending 84 per cent of it on bond. Unmarried farm servants who, in addition to their fees might have obtained capital from their parents by gift or inheritance, were also important providers of credit though the figure for the assets of the servant class in Table 1 is swelled by the resources of two older male domestic servants in Panmure House. Many of the categories used here reflect stages in the life-cycle rather than distinctive socio-economic groups. Tenants and their families may thus have been net recipients of credit at some stages in their lives and net providers of it at others.
Table 2. Origins of money owed by Tenants and Cottars

<table>
<thead>
<tr>
<th></th>
<th>Burghs %</th>
<th>Nobility Gentry %</th>
<th>Clergy %</th>
<th>Tenantry &amp; Lower %</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARGE TENANTS</td>
<td>42</td>
<td>7</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>MEDIUM TENANTS</td>
<td>14</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>SMALL TENANTS</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>COTTARS, SMALL-HOLDERS</td>
<td>3</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 3. Destinations of Loans by Various Groups.

<table>
<thead>
<tr>
<th></th>
<th>Burgh %</th>
<th>Nobility Gentry %</th>
<th>Clergy %</th>
<th>Tenantry &amp; Lower %</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARGE TENANTS</td>
<td>1</td>
<td>5</td>
<td>37</td>
<td>0</td>
</tr>
<tr>
<td>MEDIUM TENANTS</td>
<td>12</td>
<td>22</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>SMALL TENANTS</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>COTTARS, SMALL-HOLDERS</td>
<td>1</td>
<td>0</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>WIDOWS, SINGLE WOMEN</td>
<td>3</td>
<td>56</td>
<td>21</td>
<td>0</td>
</tr>
<tr>
<td>ELDERLY &amp; SINGLE MEN</td>
<td>10</td>
<td>3</td>
<td>28</td>
<td>10</td>
</tr>
<tr>
<td>SERVANTS</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>26</td>
</tr>
<tr>
<td>WHOLE SAMPLE</td>
<td>7</td>
<td>16</td>
<td>19</td>
<td>1</td>
</tr>
</tbody>
</table>

Tables 2 and 3 show the patterns of borrowing and lending within the sample. As debtors and creditors are generally named in full it is possible to establish the social status of most of them. Rents and servants' fees due for the current year have been excluded from the analysis as they would normally have been met from the profit of that year's farming activity rather than from capital assets. It can be seen that smaller tenants and cottars obtained most of their credit from within the farming community itself. The larger tenants, with more orientation towards production for the market and greater contact with nearby burghs such as Arbroath, Brechin and Dundee, drew on urban sources of credit to a far greater degree. Rent arrears apart, the landed elite were not very important as providers of credit to the lower levels of rural society. On the other hand the nobility and gentry were more significant as debtors, borrowing particularly from larger tenants and widows. Yet despite this a high proportion of the money loaned by the rural population was directed to friends, relations and neighbours within their own community rather than to outside borrowers. Space does not permit a full review of the patterns of debt and credit which existed within this small sample. The testaments make it possible to examine variations in capital accumulation over time for different social groups, the role of kinship in financial transactions, and, from the wills which are attached to some of the testaments, the inheritance strategies of...
tenant and cottar families. It is hoped that enough has been presented here to convey something of the tremendous potential which exists for undertaking local social studies of communities in seventeenth and eighteenth-century Scotland using group of testaments, especially where the data which they contain can be supplemented by information drawn from estate papers and parish registers.\(^\text{14}\)

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6 F. J. Shaw, The Northern and Western Islands of Scotland (Edinburgh 1980) p. 9

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A more detailed analysis of patterns of debt and credit among the inhabitants of the Panmure estates will be presented in the proceedings of the 1985 conference on Scottish and Irish social and economic history.

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PATTERNS OF MIGRATION OF APPRENTICES INTO ABERDEEN AND INVERNESS DURING THE EIGHTEENTH AND EARLY NINETEENTH CENTURIES

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Abstract: The apprenticeship records of Aberdeen and Inverness provide details of patterns of migration into two Scottish regional centres during the seventeenth, eighteenth and early nineteenth centuries. The general characteristics of apprenticeship migration into these two towns are discussed. Poisson regression analysis is used to determine the extent to which there were distinct differences in levels of migration at a parish level within their hinterlands and to explain these differences in terms of variables such as population, distance, nearness to other urban centres and regional economic patterns.

Migration has long been recognised as one of the most important dynamic elements in the geography of human populations. It has been particularly significant in the historical geography of Scotland, the Scots having been characterised by high levels of mobility, especially during the eighteenth and nineteenth centuries when migration was both a cause and an effect of major social and economic changes such as rural depopulation, urbanisation and industrialisation. Most previous work has, however, concentrated on the later nineteenth century using published census statistics and census enumerators' books. Comparatively little research has been carried out on patterns of migration during the eighteenth and early nineteenth centuries despite the major developments which occurred at this time, notably the transformation of the Scottish economy by the early phases of the Industrial Revolution. Most research on this earlier period has focused on emigration and apart from recent work on patterns of movement into planned estate villages, there have been few studies of internal migration. The scale and character of movement into the larger towns, which were growing steadily during this period, has been particularly neglected.

A problem in studying migration before the advent of detailed census data is that the available sources only provide information on specific categories of migrant so that it is difficult to build up a general picture. A source for urban in-migration which has been used frequently in England is apprenticeship records. In their fullest form these record the name of the apprentice, his father's name, occupation or status and domicile, and the name and trade of the master to whom the apprentice was bound. Such records allow the geographical and social origins of apprentices to be studied. The records relate almost exclusively to males; only occasionally are women mentioned as parents, mistresses or apprentices. While apprentices cannot be taken as representative of all male migrants to the towns, it has been argued that they were typical of the most numerous group, those who were young, single and upwardly mobile.

In many Scottish burghs apprentices were registered only in the minute books of individual merchant and craft corporations. In such cases the quality of information can vary greatly between guilds at any period, and through time within the same incorporation. Two towns which maintained standardised general registers of apprentices for all guilds were Aberdeen and Inverness.
and Inverness8. The Inverness register records nearly 1,000 apprentices between 1730 and 1825 while those for Aberdeen list over 2,000 from the early seventeenth century to 1825. The registers are not complete records of all apprentices: the Aberdeen one has gaps in the late seventeenth and early eighteenth centuries. In addition, entries were often made retrospectively, probably when an apprentice had served his time, so that those who failed to complete their apprenticeship may have been omitted. Nevertheless, enough data are available to allow a study of in-migration into the two towns highlighting many features of population movements in Scotland at this time.

Both towns lay outside the rapidly urbanising and industrialising central belt of Scotland but were important regional service centres. Aberdeen was the third largest burgh in Scotland in the late seventeenth century9, and by 1755, although overtaken in size by Dundee, the town had a population of over 11,00010. By 1801 Aberdeen had lost ground to expanding industrial centres further south but with a population of 26,500 was still the largest town outside the Central Lowlands. Inverness had a population of up to 4,000 in the late seventeenth century11. In 1755 the parish of Inverness, which included a sizeable landward area, held 9,730 people12. By 1821 this had grown to 12,26413. The town was always a second-rank burgh but its importance was enhanced by its location in the lightly urbanised north of Scotland.

As well as providing services for a wide rural hinterland both towns were industrial and trading centres. Aberdeen was Scotland’s major exporter of woollen cloth in the later seventeenth century14. During the following century the town also developed linen and cotton manufacture, quarrying, brewing, distilling, and shipbuilding15, while the port had a significant independent trade with the Continent. Inverness also had an important trade in agricultural produce in the eighteenth and nineteenth centuries, maintaining strong coastal links with Edinburgh16. The town’s industries included linen, worsted and hemp manufacture, and shipbuilding17.

Table 1 summarises the characteristics of the apprenticeship migration fields of the two burghs. The mean distances travelled by apprentices migrating to each town were similar and did not change significantly during the period. The average distance travelled by apprentices moving to Aberdeen in the early nineteenth century was almost identical to that for the seventeenth century despite the major social and economic changes which had occurred in north-east Scotland during the intervening period.

The pattern of recruitment to both burghs was a local one, over 75% of migrants to each town being drawn within a 40 km. radius. The proportion of Aberdeen apprentices who were migrants fell from the seventeenth to the eighteenth century, then more markedly still in the early nineteenth century. This trend is similar to the situation in Edinburgh in the later eighteenth century. In the case of Edinburgh it has been argued that urban growth elsewhere provided alternative opportunities which diverted growing numbers of potential apprentices from Edinburgh to more local destinations. The rapid growth of Glasgow during the later eighteenth century has been shown to have contributed to the sharp curtailment of the flow of migrant apprentices to Edinburgh from west-central Scotland18. In the case of Aberdeen, however, competition from other large urban centres.
Table 1. Summary Characteristics of the Apprenticeship Migration Fields of Aberdeen and Inverness.

### Mean Distance Migration: km.

<table>
<thead>
<tr>
<th>Period</th>
<th>Aberdeen</th>
<th>Inverness</th>
</tr>
</thead>
<tbody>
<tr>
<td>1625-49</td>
<td>32.7</td>
<td>78.2</td>
</tr>
<tr>
<td>1650-74</td>
<td>28.7</td>
<td>73.3</td>
</tr>
<tr>
<td>1700-24</td>
<td>26.6</td>
<td>61.5</td>
</tr>
<tr>
<td>1725-49</td>
<td>38.5</td>
<td>59.6</td>
</tr>
<tr>
<td>1750-74</td>
<td>40.3</td>
<td>59.7</td>
</tr>
<tr>
<td>1775-99</td>
<td>53.4</td>
<td>46.6</td>
</tr>
<tr>
<td>1800-24</td>
<td></td>
<td>30.2</td>
</tr>
</tbody>
</table>

### Origins of Apprentices

<table>
<thead>
<tr>
<th>Period</th>
<th>Within the burgh</th>
<th>Migrant</th>
<th>Within the burgh</th>
<th>Migrant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1625-49</td>
<td>21.6</td>
<td>78.2</td>
<td>32.4</td>
<td>67.6</td>
</tr>
<tr>
<td>1650-74</td>
<td>28.7</td>
<td>61.5</td>
<td>32.4</td>
<td>67.6</td>
</tr>
<tr>
<td>1700-24</td>
<td>26.6</td>
<td>59.6</td>
<td>30.9</td>
<td>69.1</td>
</tr>
<tr>
<td>1725-49</td>
<td>40.3</td>
<td>59.7</td>
<td>24.5</td>
<td>75.5</td>
</tr>
<tr>
<td>1750-74</td>
<td>40.3</td>
<td>59.7</td>
<td>24.5</td>
<td>75.5</td>
</tr>
<tr>
<td>1775-99</td>
<td>53.4</td>
<td>46.6</td>
<td>30.2</td>
<td>69.8</td>
</tr>
<tr>
<td>1800-24</td>
<td>53.4</td>
<td>46.6</td>
<td>30.2</td>
<td>69.8</td>
</tr>
</tbody>
</table>

### Origins of Migrant Apprentices

<table>
<thead>
<tr>
<th>Period</th>
<th>Burgh %</th>
<th>Rural %</th>
<th>Burgh %</th>
<th>Rural %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1625-49</td>
<td>14.4</td>
<td>85.6</td>
<td>14.3</td>
<td>85.7</td>
</tr>
<tr>
<td>1650-74</td>
<td>16.9</td>
<td>83.1</td>
<td>16.7</td>
<td>83.3</td>
</tr>
<tr>
<td>1700-25</td>
<td>16.7</td>
<td>83.3</td>
<td>25.0</td>
<td>75.0</td>
</tr>
<tr>
<td>1725-49</td>
<td>16.6</td>
<td>84.4</td>
<td>19.0</td>
<td>81.0</td>
</tr>
<tr>
<td>1750-74</td>
<td>19.3</td>
<td>80.7</td>
<td>19.3</td>
<td>80.7</td>
</tr>
<tr>
<td>1775-99</td>
<td>19.3</td>
<td>80.7</td>
<td>19.3</td>
<td>80.7</td>
</tr>
<tr>
<td>1800-24</td>
<td>19.3</td>
<td>80.7</td>
<td>19.3</td>
<td>80.7</td>
</tr>
</tbody>
</table>

cannot provide an entirely satisfactory explanation for this trend because of the limited size of the city's apprenticeship migration field. It is possible that this tendency reflects changes in the relationships between Aberdeen and its rural surroundings in which, as large-scale industry became more important relative to the town's traditional role as a service centre, a greater social split opened between town and country. Aberdeen masters may have become more concerned than in earlier times to obtain boys with experience of the urban environment, making it harder for boys from rural areas to obtain places. Changes in the social structure of both town and country may have diminished the kind of personal contacts which had enabled boys from rural origins to obtain apprenticeships. Such suggestions are speculative as so little is known about how urban-rural relationships changed with the onset of industrialisation but it is interesting to note that for Inverness the proportion of apprentices who were migrants held steady from the mid-eighteenth to the early nineteenth century. Inverness, much smaller than Aberdeen in 1755, also grew more slowly thereafter and developed industry on a more limited scale, suggesting that the town's traditional functions as a service centre for
surrounding rural areas, and the personal links which they generated, remained relatively important.

Given the character of the hinterlands it is not surprising that 80% or more of all migrant apprentices to both towns came from rural backgrounds. It is hard to differentiate between ‘rural’ and ‘urban’ origins due to the problem of determining which centres were truly urban. In Table 1 apprentices originating from royal and baronial burghs have been distinguished from those with purely rural origins. For Aberdeen there is a tendency for the proportion of migrant apprentices drawn from burghs to increase between the early eighteenth and nineteenth centuries. Given that the proportion of apprentices who were migrants was also falling at the same time this indicates a definite shift away from apprentices with rural backgrounds which again is not shown by Inverness. This reinforces the previous suggestion about the growing importance of personal linkages within the urban system and a decline in rural-urban contacts.

A more detailed study of spatial variations in the pattern of migration to each town was undertaken by Poisson regression analysis using the GLIM computer package. Poisson regression has been shown to be the most appropriate type of linear regression to use in situations where the dependent variable consists of counts, in this case numbers of apprentices originating from particular parishes. The factors influencing migration were examined at a parish level. The numbers of Aberdeen apprentices originating from each parish within the counties of Aberdeen, Banff and Kincardine were recorded for the periods 1725-49, 1775-99 and 1800-24. Inverness apprentices coming from parishes in the counties of Inverness, Moray, Nairn and Ross and Cromarty were recorded for the same periods. Numbers of apprentices for the three 25-year periods were related to the distance of each parish from the respective town (measured from the parish church) and the population of each parish in 1755, 1801 and 1821. In addition, apprentices migrating to Aberdeen during the seventeenth century were related to distance and parish population figures for 1755. No reliable population data were available for the seventeenth-century and the 1755 figures were used as a substitute; demographic historians have suggested that population levels in Scotland in 1755 are likely to have differed very little from those of the late seventeenth century, before the onset of the famines of the 1690s. It was hypothesised that levels of migration from each parish would have been related negatively to distance from the destination and positively to the population of the parish.

The initial regressions were carried out to determine to what extent the number of apprentices migrating from each parish was related to its population and distance from the appropriate burgh. Graph plots against the dependent variable indicated that transformation of the data produced a relationship which approximated much more closely to a linear one. Accordingly, the natural logarithms of population and distance were fitted as independent variables. The results are shown in Table 2.

In GLIM the goodness of fit of a Poisson regression model is measured by a statistic known as the deviance, which has a value of zero if the regression model fits exactly. If a model is true then the distribution of the deviance is similar to that of a chi-square distribution and it is possible to evaluate its significance by comparing its deviance with the critical level of chi-square.
MIGRATION OF APPRENTICES

Table 2. Goodness of Fit

<table>
<thead>
<tr>
<th>Aberdeen</th>
<th>Model</th>
<th>Deviance</th>
<th>Degrees of Freedom</th>
<th>Critical value of chi square at 0.05 level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seventeenth Century</td>
<td>Null</td>
<td>244.5</td>
<td>122</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Population</td>
<td>210.8</td>
<td>121</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Distance</td>
<td>170.9</td>
<td>121</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Distance + Pop.</td>
<td>166.3</td>
<td>120</td>
<td>151.7</td>
</tr>
<tr>
<td>1725-49</td>
<td>Null</td>
<td>230.0</td>
<td>122</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Population</td>
<td>221.9</td>
<td>121</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Distance</td>
<td>143.4</td>
<td>121</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Distance + Pop.</td>
<td>135.2</td>
<td>120</td>
<td>151.7</td>
</tr>
<tr>
<td>1775-99</td>
<td>Null</td>
<td>379.0</td>
<td>122</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Population</td>
<td>322.2</td>
<td>121</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Distance</td>
<td>208.0</td>
<td>121</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Distance + Pop.</td>
<td>203.3</td>
<td>120</td>
<td>151.7</td>
</tr>
<tr>
<td>1800-24</td>
<td>Null</td>
<td>614.0</td>
<td>122</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Population</td>
<td>558.9</td>
<td>121</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Distance</td>
<td>232.6</td>
<td>121</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Distance + Pop.</td>
<td>203.0</td>
<td>120</td>
<td>151.7</td>
</tr>
<tr>
<td>Inverness</td>
<td>1725-49</td>
<td>Null</td>
<td>151.9</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>Population</td>
<td>150.9</td>
<td>84</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Distance</td>
<td>95.9</td>
<td>84</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Distance + Pop.</td>
<td>94.0</td>
<td>83</td>
<td>105.3</td>
</tr>
<tr>
<td>1775-99</td>
<td>Null</td>
<td>201.3</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Population</td>
<td>200.1</td>
<td>84</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Distance</td>
<td>109.2</td>
<td>84</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Distance + Pop.</td>
<td>98.1</td>
<td>83</td>
<td>105.3</td>
</tr>
<tr>
<td>1800-24</td>
<td>Null</td>
<td>306.0</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Population</td>
<td>304.4</td>
<td>84</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Distance</td>
<td>161.8</td>
<td>84</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Distance + Pop.</td>
<td>140.0</td>
<td>83</td>
<td>105.3</td>
</tr>
</tbody>
</table>

for the appropriate number of degrees of freedom. Table 2 shows that for Aberdeen only one model, for 1725-49, was significant at the 0.05% level. For Inverness the first two, but not the last, were significant at this level. Distance was a much more significant variable than population in determining levels of migration. The hypothesis that migration was related negatively to distance and positively to population was thus substantiated. However, population and distance alone clearly failed to provide a totally adequate explanation of migration patterns for some periods. To determine how the models could be improved the patterns of the residuals were examined. (Figures 1-3). For Aberdeen, parishes sending markedly more or fewer apprentices than predicted seemed to be concentrated in particular areas rather than scattered randomly throughout the migration field. Positive residuals were more frequent from parishes in the valleys of the Dee and Don, radiating inland from the city. Negative residuals clustered in Kincardineshire and to a lesser extent in Buchan. The tendency of Kincardineshire parishes to record negative residuals also seemed to increase through time. In the case of Inverness, positive residuals were more frequent
Fig. 1 — Migration to Aberdeen, 17th century and 1725-49: residuals from regression.
Fig. 2 — Migration to Aberdeen, 1775-99 and 1800-24: residuals from regression.
for parishes along the Great Glen and around the heads of the Beauly and Cromarty Firths, while parishes in the Black Isle tended to have negative residuals.

In the light of the above trends the regression model was refined by incorporating additional variables which might improve the fit of the regression model by further reducing the deviance to significant levels. For
Aberdeen it was hypothesised that migration might have been lower from Kincardineshire due to competition from the growing industrial centre of Dundee, particularly as many parishes in the Howe of the Mearns would have looked more naturally to the south towards Strathmore, than northwards. It was also thought that the fishing industry might have provided a source of alternative opportunity around the coast of Buchan and the Moray Firth, reducing migration to Aberdeen from these areas. Accordingly, a sector variable was included dividing the area under study into northern, western and southern components (Figure 1), to determine whether there were significant directional contrasts within the migration field. The existence of small burghs like Inverurie and Kintore might also have provided sources of local opportunity as might the increasing number of planned estate villages which were established in the later eighteenth and early nineteenth centuries. Accordingly, two other variables were incorporated which distinguished between parishes possessing a burgh or planned village and those that did not. A further variable was designed to assess the effects of differences in the rural economy of parishes in upland and lowland areas. It was not thought appropriate to include a language variable to differentiate between areas of Gaelic and Lowland speech. Recent work by Withers has shown that at this period most of the counties of Aberdeen and Banff and all of Kincardineshire spoke English while the bulk of the hinterland of Inverness spoke Gaelic. There was, therefore, no straightforward division of the hinterlands of the two burghs into large blocks of territory characterised by distinctive language differences.

Table 3. Goodness of Fit

<table>
<thead>
<tr>
<th></th>
<th>Model</th>
<th>Deviance</th>
<th>Degrees of Freedom</th>
<th>Critical value of chi square at 0.05 level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aberdeen</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seventeenth</td>
<td>Distance + Pop.</td>
<td>166.3</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>century</td>
<td>+ upland/lowland</td>
<td>158.0</td>
<td>119</td>
<td></td>
</tr>
<tr>
<td></td>
<td>+ Sector</td>
<td>146.0</td>
<td>118</td>
<td>148.3</td>
</tr>
<tr>
<td>1725-49</td>
<td>Distance + Pop.</td>
<td>135.2</td>
<td>120</td>
<td>151.7</td>
</tr>
<tr>
<td>1775-99</td>
<td>Distance + Pop.</td>
<td>203.3</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td></td>
<td>+ Sector</td>
<td>160.8</td>
<td>119</td>
<td>150.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(161.9 at 0.01)</td>
</tr>
<tr>
<td>1800-24</td>
<td>Distance + Pop.</td>
<td>203.0</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td></td>
<td>+ Sector</td>
<td>148.3</td>
<td>119</td>
<td>150.6</td>
</tr>
<tr>
<td>Inverness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1725-49</td>
<td>Distance + Pop.</td>
<td>94.0</td>
<td>83</td>
<td>105.3</td>
</tr>
<tr>
<td>1775-99</td>
<td>Distance + Pop.</td>
<td>98.1</td>
<td>83</td>
<td>104.1</td>
</tr>
<tr>
<td></td>
<td>+ W. Highlands</td>
<td>88.9</td>
<td>82</td>
<td></td>
</tr>
<tr>
<td>1800-24</td>
<td>Distance + Pop.</td>
<td>140.0</td>
<td>83</td>
<td>104.1</td>
</tr>
<tr>
<td></td>
<td>+ Planned vills.</td>
<td>100.6</td>
<td>82</td>
<td></td>
</tr>
</tbody>
</table>

For Inverness a sector variable was also introduced dividing the migration field in three (Figure 3). Additional variables assessed the effects of burghs and planned villages, while an upland/lowland variable, and one which
isolated the parishes of the West Highland coast and islands were included to see whether socio-economic differences between contrasting regions influenced migration.

For the Aberdeen migration field revised models were produced which were significant at the 0.05% level for the seventeenth century, 1725-49 and 1800-24, and at the 0.01% level for 1775-99. For the seventeenth century, once population and distance had been taken into account, there was a significant tendency for fewer apprentices to come from upland areas. At this time the highland interior of Aberdeenshire was comparatively backward in its agricultural and social structures²³, and this may have reduced contact with the city. In addition notably fewer apprentices came from the southern sector. For the period 1725-49 none of the additional variables improved the model which was already highly significant. For 1775-99 there was again a tendency for fewer migrants to come from the southern sector. In 1800-24 the sector variable assumed greater importance with even fewer apprentices being drawn from Kincardineshire parishes in relation to population and distance compared with other areas.

For Inverness in 1725-49 the original model was already a good fit and none of the additional variables improved it significantly. For 1775-99 and 1800-24 revised models were produced which were significant at the 0.05% level. For 1775-99 there was a tendency for parishes in the West Highlands and Skye to send more apprentices than expected in relation to their population and distance from Inverness. This may have been due to the build up of population in these areas in the later eighteenth century and the start of substantial out-migration²⁴. In 1800-24 there was a marked tendency for fewer apprentices to come from parishes in which planned villages had been established. Neither the upland/lowland nor the sector variable had significant effects for any period.

In summary, patterns of apprenticeship migration into Aberdeen and Inverness have been shown to have exhibited remarkable similarity and stability over time in terms of the origins of the migrants and the mean distance migrated. Statistically significant models of migration have been produced for periods ranging from the seventeenth to the early nineteenth centuries. With such small migration fields distance had a greater influence in determining patterns of movement than population. Additional variables had comparatively minor effects. For Aberdeen broad variations in the rural economy within the migration field between upland and lowland areas had no discernible influence on patterns of movement after the seventeenth century. Because of the limited extent of Aberdeen’s migration field, most of it fell within the Lowland part of the North East. Nor did the rise of planned villages in the later eighteenth-century have any discernible effect. One might have expected planned villages to have influenced migration to Aberdeen; nearly 50 were established in the counties of Aberdeen, Banff and Kincardine by 1825 and recent work has shown that they recruited from limited local hinterlands²⁵. Their lack of effect was probably due to their wide distribution throughout the three counties; comparatively few were located within the area which supplied most of Aberdeen’s migrant apprentices. In the case of Inverness the tendency for planned villages to be clustered in the lowlands around the Beauly and Cromarty Firths,
comparatively close to the town, probably explains their negative influence on migration in the late eighteenth century.

A sectoral element within the migration field has been identified for Aberdeen with a tendency for fewer apprentices to be drawn from Kincardineshire in most periods, but particularly in the early nineteenth century. The most likely explanation is the competition offered by Dundee, noticeable before the onset of the Industrial Revolution and increasing thereafter. Work on the origins of Dundee apprentices may help to clarify this. Within the counties of Aberdeen and Banff there was no discernible sectoral tendency, the coastal areas of Banff and Buchan did not provide significantly fewer apprentices than the inland areas once population and distance were allowed for. The same applied to Inverness apart from the later eighteenth century when more apprentices than predicted were drawn from the West Highlands.

The parameters which have been used are, admittedly, rather crude. It is likely that many other factors which have not been incorporated influenced patterns of apprenticeship migration. Differences in the demographic and social structures of rural parishes, the distribution of rural industry and the progress of agricultural change may all have contributed to the variations which the regression analysis has not accounted for as might contrasts in accessibility between parishes at similar distances from the towns studied. The importance of random factors such as personal contact cannot be discounted; one cannot reconstruct the decision-making processes behind the migration of each apprentice.

This article has demonstrated that the recruitment areas for apprenticeship migration into two Scottish provincial towns were comparatively small and local, contrasting markedly with the pattern of movement in Edinburgh at a similar period. The migration fields displayed striking stability through time despite marked social and economic changes in their hinterlands. Even the sectoral trend towards fewer migrants from Kincardineshire to Aberdeen persisted from the seventeenth to the nineteenth century, confirming on a small scale recent work on Edinburgh. The potential of Poisson regression modelling for the study of historical migration data has also been demonstrated. It is hoped that future work on urban in-migration in Scotland between the seventeenth and nineteenth centuries may be able to build on these findings in order to identify the social and economic differences between communities at a local scale which influenced levels of migration.

Acknowledgements: The authors would like to express their gratitude to Andrew Lovett, Department of Geography, University of Lancaster for commenting on a draft of this paper, to Mrs. A. Jackson for drawing the maps and to thank the Economic and Social Research Council for funding under grants HR8750/1 and HR98803/1.


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The Newbigin Prize of £100 is offered annually for an essay under the following conditions:

1. The prize shall be awarded to applicants who first graduated within three years prior to their application.

2. The submission should be in the form of a paper, not exceeding 5,000 words, suitable for publication in the Scottish Geographical Magazine. It may be based on an academic dissertation or similar piece of work.

3. The theme should be geographical and associated with the interests of Dr Newbigin, and need not be confined to a Scottish context.

4. Two copies of essays for the prize should be submitted to the Secretary, Royal Scottish Geographical Society, 10 Randolph Crescent, Edinburgh EH3 7TU, not later than December 31st.
The Occupational Structure of Scottish Burghs in the Late Seventeenth Century

Ian D. Whyte

In recent years urban historians have shown considerable interest in the social and economic structure of early-modern European towns. An important aspect of this work has been the study of urban occupations as a means of shedding light on the character of individual towns. Much of this work has concentrated on larger towns possessing wide ranges of specialist occupations. Nevertheless, smaller centres were more important numerically and, though modest in size and limited in the variety of their activities, they constituted most rural dwellers' experience of urban life. In addition there has been a lack of comparative studies of the occupational structures of towns, whether at different levels of the urban hierarchy within a country or region or between similar-sized towns in different areas.

Scotland, though not as well documented as some European nations during early-modern times, is particularly interesting as regards urban occupational structures for several reasons. First, the relatively small size of both Scotland and of most Scottish burghs, facilitates a comparative approach. Second, Scottish urban development during the seventeenth century differed in some important respects from that of England where much recent work on urban occupations has been concentrated. Burgh foundation was still proceeding vigorously in Scotland during the seventeenth century and the urban hierarchy was less fixed than that of England, which remained remarkably stable between 1500 and 1700. Third, while the proportion of Scotland's population living in towns, however defined, was certainly smaller than in England or the Low Countries, the level of urbanisation, especially in Lowland Scotland and most notably in Fife and Lothian, was
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probably quite high compared with many parts of Europe. As a rough measure, the proportion of Scotland's population living in the four largest towns in the later seventeenth century was probably greater than in Ireland, the Scandinavian countries or France, and possibly similar to Spain or Italy. 5 Such comparisons must be treated with care but they may indicate that urban development in late seventeenth-century Scotland was not as backward as has sometimes been supposed. Lastly, the contrasting legal status and trading position of royal burghs on the one hand and burghs of barony and regality on the other, makes a comparative study of the occupational structures of towns from each group of especial interest, particularly during the later seventeenth century when royal burghs were facing increasing competition from the upstart unfree centres. 6

Studies of the role and functions of burghs in early-modern Scotland have concentrated on their institutional frameworks rather than on their societies and economies, 7 but from what is known of these it is possible to pose some questions about the occupational structure of Scottish burghs. To what extent were the burghs homogenous in their social and economic characteristics? One would expect there to have been major differences in levels and distribution of urban wealth between the capital, the larger regional centres and smaller burghs, whether royal or baronial. One would also expect variations in the relative importance of different occupational groups between the larger burghs with administrative functions and substantial overseas trade, and smaller local centres. Equally, one could postulate contrasts in the occupational structure and distribution of wealth between royal and baronial burghs as a result of their contrasting legal status and trading privileges. Any such differences which can be identified should help to clarify the relationships between royal and baronial burghs at this time and determine the extent to which their economic activities were in competition or co-operation as well as adding to our general understanding of how towns functioned in the Scottish economy.

Looking more closely at manufacturing one might ask to what extent individual burghs specialised in the production of particular commodities. Work on early-modern towns in England has suggested that the general level of urban specialisation was low. 8 Most towns had a similar spread of employment in trading, retailing, and basic industries such as textiles, clothing, leather making, metal working, building, and food and drink. Deviations from
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this basic pattern, representing elements of functional specialisation, were not very marked. Was this the case in Scotland? One would expect there to have been some variation at least in the activities which were carried on in Scottish burghs not only due to differences in their size and status but also to variations in the physical character and economic resources of their hinterlands.

A number of sources provide information on burgh occupations. Burgess registers can be used to chart the changing fortunes of individual merchant and trades incorporations. Such men and their families, however, only formed about a third of the population in many burghs. Some urban marriage registers for the later seventeenth and early eighteenth centuries provide the occupations of husbands, but the best source for an introductory survey of burgh occupations is the poll tax records of the 1690s. Data have survived for burghs in three main areas: Aberdeenshire, the Lothians and Renfrewshire. Information has also been obtained for individual burghs elsewhere. Thirty-seven centres were analysed ranging from Edinburgh and regional centres like Aberdeen and Perth through smaller royal and baronial burghs to non-burghal market centres. In addition, partial information was available for Dumfries, Glasgow and Inverness. The poll tax lists are by no means perfect for this purpose; there are indications that the occupational classification used by the tax collectors was a simplified one. Nevertheless, the records provide a fairly standardised basis for comparing broad categories of occupation between a number of centres.

Urban occupations can be classified by two principal methods: by type of activity and type of product. Both systems have advantages in different contexts. A type-of-activity classification has been employed here initially to explore the broader functional differences between burghs while a type-of-product classification has been used for the main kinds of manufacture to highlight particular specialisations. It must, however, be emphasised that within the occupational categories which have been used people may have carried out a variety of functions. For instance, a craftsman listed as a tailor may have bought and processed the cloth for his workshop, manufactured garments himself, supervised the work of his journeymen and apprentices and handled the sale and distribution of the finished products. Many people may have had more than one occupation but this is rarely indicated in the poll tax records. The type-of-product classification involved little ambiguity or overlap except between the leather and clothing
A type-of-activity classification of occupations

Table 10.1 shows a breakdown of the male pollable workforce of the thirty-seven centres using a type-of-activity classification. The manufacturing category equates with what Patten has termed ‘artisan-retailing’ and does not assume that all tradesmen were solely engaged in manufacture. Otherwise, the divisions are reasonably clear-cut and should be adequate to bring out general trends.

Edinburgh was clearly distinguished from other large burghs by the prominence of the professions. Much of this was due to the law, which accounted for 62 per cent of this group, and medicine, which made up a further 22 per cent. The remainder included those in the church, education and army officers. This group substantially outnumbered the Edinburgh merchants. In addition, landowners formed a smaller but still significant group in the capital, including those who owned town houses and those occupying rented accommodation at the time of the survey. Almost certainly the size and importance of this group in the capital is underestimated, as many of the nobility probably occupied their town residences for only part of the year and were polled on their country estates. Many men listed as advocates and merchants would also have been heritors. The landowners would have helped to maintain the demand for high-level services which supported the professions as well as stimulating the city’s luxury trades. The many domestic servants in their households were also an important element in the city’s population. There was, however, considerable variation within the landowning group. At one extreme were the earl of Crawford and the duke of Gordon who maintained large retinues including private tutors and chaplains. At a lower level were men like Robert Hamilton, ‘heritor at Newbattle and frequently resident in Edinburgh’ with two men-servants. At the bottom there was a good deal of genteel poverty — for example Patrick Inglis, gentleman ‘now denuded and out of possession’ with only a single servant woman.

Aberdeen, as the northern capital, also had an important professional group, proportionally the largest after Edinburgh. Landowners and gentry formed a slightly larger proportion of the
population than in Edinburgh but Aberdeen did not function as a social centre for the nobility in the same way as the capital. The resident heritors were mainly small lairds, many of them from cadet branches of ubiquitous north-eastern noble families like Forbes and Gordon, living off rents of under £500 Scots per year.

Of the larger burghs those which were heads of sheriffdoms and regalities — Perth, Paisley and St Andrews — had higher proportions in the professions, again mainly in law. Selkirk, centre of a remote and sparsely-populated sheriffdom, had a smaller professional elite. In the case of Paisley and St Andrews the proportion of resident heritors was also comparatively large but the men classified in this group were usually mere bonnet lairds and portioners. A group of larger baronial burghs — Bo’ness, Dalkeith, Leith and Musselburgh — were all deficient in professional employment. This was not entirely due to their less exalted status as baronial burghs for Peterhead — and to a lesser extent Fraserburgh — had professional groups more comparable in importance with those of the larger royal burghs. It is probable that the professions were better represented in Peterhead and Fraserburgh due to their comparative isolation from Aberdeen and the proximity of a fairly densely populated rural hinterland which may have enhanced their importance locally and increased their provision of high-level services. In the case of the first group of baronial burghs their nearness to Edinburgh may have diminished the need for a wide range of professional services. In the smallest burghs, whether royal or baronial, one or two ministers, a notary and a schoolmaster comprised the professional element. Centres below about 180 pollable persons did not possess a full range of the main professional groups.

Given the importance of the merchant guilds in the larger royal burghs, the strength of the merchant community might be expected to provide an indication of urban prosperity, although within this group in particular great contrasts in wealth and status occurred. The merchant class in Edinburgh was not as large in relation to the male pollable population as in some other burghs. There were barely twice as many men styled ‘merchant’ as in Aberdeen. To balance this, the Edinburgh merchant elite was far more wealthy and may have contained a larger proportion of men engaged in overseas trade than in Aberdeen. Many of the wealthier Edinburgh tradesmen may have handled the distribution within Scotland of the products of their workshops. Among the larger burghs a clear group is formed by those with an important
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Source: SRO, MSS Poll Tax Returns
regional trading role and large merchant communities. Aberdeen, Paisley, Perth and Selkirk fall into this group while the incomplete data for Dumfries, Glasgow and Inverness indicate that they were similar. St Andrews was the only larger royal burgh which had a relatively small merchant community. Of the baronial burghs Fraserburgh, Peterhead and Greenock had large merchant communities. By contrast, Bo'ness, Dalkeith, Grangepans, Leith and Musselburgh had small merchant groups. All these burghs were close to the capital and there is evidence that their trade was dominated by Edinburgh merchants and also, in the case of Bo'ness, by those from other royal burghs including Glasgow, Linlithgow and Stirling. The profits from trading tended to bypass the inhabitants of Bo'ness itself. Grangepans was even more dependent and had only two resident merchants. Although shipping was the most important single occupational category in Grangepan the shipowners were merchants from other burghs. The contrast with Greenock, which one might have expected to have been similarly dependent on Glasgow, is striking.

The designation 'merchant' was almost universal, suggesting that trading was still unspecialised. Only twenty-two men in Edinburgh were listed as 'shopkeeper' and outside the capital this term was used infrequently. Other sources indicate, however, that craftsmen such as the Edinburgh candlemakers had their own shops and handled at least some of the distribution of their own goods, so that people polling as shopkeepers may have specialised in the sale of imported items. Clearly production, wholesaling and retailing were not yet distinctly separated.

There was, naturally, a marked contrast in the transport and shipping sector between coastal and inland burghs. Within this category have been included men listed as mariner, seaman, skipper, fisherman, boatman, carrier and carter. The number of people in this grouping in Aberdeen is suspiciously low, especially in view of the importance of the fishing industry in the town in the early eighteenth century but the coastal quarter of Footdee is missing from the records. The low figures for Perth confirm the evidence of the customs records that the upper Tay was too shallow for effective navigation at this time and that most of the burgh's trade went through ports lower down the Firth. The importance of transport and shipping was marked in Greenock, which was a major centre of the herring fishery, and only slightly less so at Bo'ness, Fraserburgh, Leith, Newark and Peterhead. Greenock, Fraserburgh and Peterhead had substantial percentages both in
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shipping and the merchant class, suggesting a measure of independent trading activity, but in the case of Bo'ness, Grangepans, Newark and Leith the concentration of employment in shipping, with the smallness of the professional and merchant groups, strengthens the impression that such centres were closely tied in with the activities of the major royal burghs which traded through them. Specialisation in fishing was extreme in some smaller centres, accounting for 52 per cent and 50 per cent of the recorded male population in the east coast ports of Rosehearty and Newburgh respectively, the highest level of specialisation in any function for any centre.

Overland communication employed few people full time, even in the largest burghs. Edinburgh and Aberdeen had some stablers and horse hirers but specialist freight carriers were as likely to be found in surrounding rural areas. Among the smaller centres Old Meldrum and Huntly had unexpectedly large numbers of merchants in relation to their size, suggesting that they had important subregional roles in trading and distribution. Minor local traders with little stock, including itinerant chapmen, were found in even the smallest centres.

Male domestic servants were particularly numerous in Edinburgh and other large royal burghs, where they made up a substantial proportion of the male pollable population. The significance of this group has often been underestimated in previous studies of urban occupations, possibly because many sources fail to record them. Nevertheless, they made up nearly a quarter of the male workforce of Edinburgh, reflecting the greater wealth of the capital for only St Andrews, of the other larger burghs, approached this figure. Details of female employment are generally lacking in the poll tax records except for female domestic servants. These formed a large and well-defined group outnumbering male servants in all the major burghs studied. Table 10.1 shows the ratio of female to male servants and there is a distinct tendency for the figures to fall in step with the sizes of the burghs. Male servants generally outnumbered female ones in rural areas and the smaller burghs, themselves semi-rural in character, reflected this.

Manufacturing was the largest single type-of-activity group in many burghs, as one would have expected, employing around half the recorded male workforce in many cases. Edinburgh and Aberdeen had proportionally smaller manufacturing sectors due to the importance of other groups, but in the case of Edinburgh much
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Craft activity probably went on in the suburbs beyond the burgh limits. The highest percentage in manufacturing was recorded by Perth but most of the towns in which manufacturing dominated were baronial burghs with correspondingly small merchant communities and professional classes.

It is hard to be precise about employment in agriculture in Scottish burghs at this time. It is likely to have engaged a sizeable proportion of the population of many burghs on a part-time basis. Many merchants and tradesmen, even in the largest towns, would, as burgesses, have possessed shares in the arable lands and common grazings of their burghs. An uncertain proportion, particularly significant in Edinburgh, Glasgow, Aberdeen and Dundee, would also have owned and leased land beyond the town limits. In smaller burghs where little infilling of burgage plots had occurred, a good deal of produce may have come from gardens and orchards actually within the burgh. Even in Edinburgh a considerable proportion of the population obtained temporary employment in the surrounding countryside at harvest time. The poll tax records, however, only identify those inhabitants who were engaged in agriculture as their primary occupation. Such people were not absent even in Edinburgh, though most of the people in this category were cottars and smallholders living in the suburbs. The existence of urban dairies in Edinburgh is suggested by a small number of 'cow feeders' in the less densely built-up Canongate, which also contained over thirty gardeners. The agricultural element in baronial burghs like Bo'ness and Dalkeith may be partly due to the difficulty of differentiating between burgh and rural populations in the poll tax returns. In the smaller centres, however, the agricultural element rose dramatically, accounting for over 40 per cent of the recorded male population in several cases.

The occupational groupings which have already been considered must have made up a substantial proportion of the workforce in the burghs concerned. One final, almost residual, group remains for consideration: the unskilled population of labourers and casual wage earners. This group may be equated in part, but by no means entirely, with the urban poor. It has been suggested that, in the sixteenth century at least, Scottish towns did not experience the large surges of poor, unskilled subsistence migrants from rural areas which were a feature of English towns and which created problems of urban poverty on such a scale that it has been suggested that between 30 per cent and 40 per cent of the
population of some larger English provincial towns may have been below the poverty line.\textsuperscript{32} The situation in Scotland towards the end of the seventeenth century is not so clear. The problem of poverty and the size of the floating immigrant workforce in the burghs at this time deserves detailed study. Poverty could, of course, occur among burgesses and guild brethren, as is evidenced by the records of individual incorporations.\textsuperscript{33} In addition, many people listed as tradesmen and indistinguishable in the poll tax records from guild brethren may have been poor immigrants trying to eke out a living on the fringes of burgh society with skills in textile, clothing, leather or metal manufacture learned in the countryside. A category of workmen and labourers, whether employed regularly or on a casual basis, has been identified and while such people were not necessarily all on or below the poverty line they clearly formed a comparatively low status group in burgh society. Even allowing for the likelihood that many casual workers escaped registration or were exempted from payment of the poll tax due to poverty, this group was a substantial one forming nearly a quarter of the recorded workforce in Bo’ness, Leith and Peterhead. Among the larger burghs the proportions in this group tended to be greatest in the ports where many men were probably employed in loading and unloading vessels. The high proportions in some smaller burghs may reflect concentrations of agricultural labourers serving surrounding ferm touns. The size of this group was small in Edinburgh compared with Aberdeen and it is likely that this group has been under-represented in the capital.

A type-of-product classification for manufacturing

The foregoing breakdown of the workforce by type of activity has demonstrated some important differences in the occupational and economic structure of the burghs studied. When the manufacturing sector is further broken down by type of product, as in Table 10.2, additional elements of specialisation emerge. The production of coarse woollen and linen cloth, while carried on in all centres, showed a marked concentration in some burghs. Among the larger towns, Edinburgh, Leith and Perth were relatively deficient in the textile trades, although there were many textile workers in the countryside around the first two.\textsuperscript{34} Defoe’s description of the linen industry as the mainstay of Perth’s economy suggests that the importance of textiles grew rapidly there in the two decades
The Occupational Structure of Scottish Burghs

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Source: SRO, MSS Poll Tax Returns.
The Occupational Structure of Scottish Burghs

following the poll tax.\textsuperscript{35} Aberdeen also had comparatively few textile workers. Before the 1670s the town had been a major exporter of woollen plaiding and knitted stockings,\textsuperscript{36} but much of the actual production may have taken place in surrounding rural areas. On the other hand Musselburgh, and especially Paisley, had high proportions of their craftsmen in the textile trades though in the case of the former some may have lived outside the burgh limits. In 1703 it was recorded that a woollen manufactory had existed for some years in Musselburgh employing a large number of people.\textsuperscript{37} Significantly, it had been financed by Edinburgh merchant capital. Defoe also testified to the importance of woollen manufacture in the town.\textsuperscript{38} The importance of the textile industry as an employer is probably substantially underestimated in the poll tax records due to the lack of information on female and child labour. On the other hand textile production, even on a large, organised scale, was not necessarily urban-based as the establishment of woollen manufactories at Gordon's Mill, outside Aberdeen, and at Harcarse in rural Berwickshire, indicates.\textsuperscript{39}

The high proportions of textile workers in Musselburgh and, to a lesser extent in Dalkeith, suggests that the industry in these towns may have been linked with Edinburgh, the cloth being woven in and around the baronial burghs and sent to the capital for dyeing and making up by the city's tailors. Edinburgh certainly had one of the highest levels of specialisation in clothing, as one might have expected given the concentration of wealth in the capital. Edinburgh had nearly seven times as many clothiers polling in the three highest wealth categories as Glasgow and twenty-one times as many as Aberdeen. Paisley may have been linked with Glasgow in a similar manner, though the high proportion of textile workers in smaller centres like Eaglesham may indicate that a regional specialisation in textiles was already developing in Renfrewshire. Other regional centres like Aberdeen and Perth come out relatively strongly in the clothing trades. In Perth this was due to the strength of glovemaking, which accounted for 6.3 per cent of the recorded male workforce. Situated on the edge of the Highlands, where goat keeping was more general than in the Lowlands,\textsuperscript{40} Perth was well located to obtain supplies of high-quality kid.

Leather manufacture seems to have occupied about 15–18 per cent of the tradesmen in many burghs but Musselburgh had a high degree of concentration on this activity and Selkirk was very specialised indeed, the leather trades being by far the most

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important sector of the town’s economy, accounting for over 40 per cent of the tradesmen. As the centre for an upland area with an emphasis on cattle as well as sheep rearing this is understandable; the textile trades were also fairly strong in Selkirk suggesting local linkages with sheep farming too. The souters of Selkirk were famed in Border song and it is interesting to note that the poll tax records confirm the old tradition. Other towns with concentrations in this industry were Paisley and Newark in the more pastoral west. Edinburgh and Aberdeen had lower percentages in leather manufacture, but they did have more workers in the higher-class branches of the trade: beltmakers, lorimers and saddlers. In smaller centres like Old Meldrum a local specialisation closely related to the products of the immediate rural hinterland is suggested by the high degree of specialisation.

There was less absolute variation in the metalworking sector largely because this was not such an important group of trades numerically but the figures for Edinburgh are swelled by workers in high-class occupations; armourers, gold and silver smiths, pewterers and gunsmiths, who are less frequent in other large burghs and rare elsewhere. Building and construction workers were also a relatively stable group. The proportion of craftsmen in these trades was, however, higher in ports due to shipping-related activities. Leith had as many cooperers as Edinburgh, Cartsdyke as many as Paisley. Edinburgh, with more wealth, more stone-built tenements, and restrictions on the use of wood in house construction due to the fire hazard, had a larger proportion of glaziers and slaters than smaller burghs such as Paisley where the preponderance of timber-framed housing swelled the numbers of wrights.

The food and drink sector consisted mainly of baxter, brewers and maltmen, and fleshers. The importance of these activities is probably under-represented to a greater degree than some others. In the smaller burghs much baking, brewing and fleshing may have been done as a part-time occupation, as well as on a purely domestic basis, and a good deal of it may have been done by women. Ale sellers are rarely mentioned in the poll tax returns. In 1693 the fourteen brewers of Leith (fifteen are listed in the poll tax returns of 1694) petitioned the town council of Edinburgh to require the licensing of ale sellers. Subsequently, ninety-six ale sellers in South Leith parish applied. Some of these would have lived outside the burgh itself, but only three are recorded in the poll lists. It is likely that ale selling was a widespread part-time occupation, particularly among women.
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Considering the scale of the grain trade which focused on Edinburgh and the importance of brewing in the capital the number of brewers there is surprisingly small but there are indications that much of the industry was located immediately around the capital rather than within it. The high percentage in the food and drink group in Perth is mainly due to the importance of brewing in the town. Most of the maltmen were, however, small-scale operators. Perth had only three maltmen in the highest wealth categories against thirty-three in Glasgow. The provisioning of vessels for longer voyages may help to account for the importance of this group of activities in Bo’ness compared with smaller ports whose trade was mainly coastal.

Dalkeith had an unusually high number of fleshers. This may be explained in relation to Edinburgh’s market for fresh meat. The slaughtering of animals was not allowed within Edinburgh itself, and this encouraged fleshers from the surrounding area to compete with those of the capital. The Scotts of Buccleuch, who owned land in the vicinity of Dalkeith, brought livestock from their extensive Border estates to fatten them for the Edinburgh market. The animals may have been slaughtered at Dalkeith and the meat delivered to the capital. A by-product, tallow, supplied a group of Dalkeith candlemakers who competed in the capital with the city’s own tradesmen. On the other hand the leather industries were not prominent in Dalkeith. The hides may have been sent elsewhere for processing, possibly to Musselburgh, which had a large concentration of leather workers.

Few burghs had many workers in industries whose location was linked to the distribution of a specific, limited resource. Bo’ness and Grangepans are unusual in the importance of the coal and salt industries. In Bo’ness, however, coal mining employed only 2.9 per cent of the male pollable population and salt production another 1.6 per cent, confirming the burgh’s report of 1699 that outcrops of coal in the immediate vicinity of the town were becoming worked out and that, while the town exported coal and salt in large quantities, most of the production came from mines and saltpans further along the coast.

In the late seventeenth century efforts had been made to establish ‘manufactories’ with government support to produce commodities which were normally imported at high cost. Leith had soap, sugar and glass works by 1694 but it is impossible to estimate how many people were employed in them as their labour force was probably listed under general descriptions such as ‘workman’.

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The Occupational Structure of Scottish Burghs

The pattern of urban wealth

So far this study has considered what people did in the burghs rather than the rewards which they reaped for their activities. The poll tax records also provide data on the distribution of urban wealth. There are problems in using them as wealth may often have been under-assessed with people polling in lower categories than they should have done. Analysis is also complicated by the modest lower limit of the highest wealth category, 10,000 merks. The value of trading stock above this level is rarely given. The records for Inverness credit some men with up to 50,000 merks of stock and in the largest burghs the wealthiest men must have possessed much more.

Table 10.3 shows the distribution of wealth in the burghs for which data are available. Merchants and tradesmen who were listed in the three highest categories — 500–4,999 merks, 5,000–9,999 merks and 10,000 merks and over — are included as are professional people polling at higher rates, heritors with over £300 Scots a year income from rents, and 'gentlemen'. The numbers in each of three groups — professional and landowning, merchants and tradesmen — are expressed as percentages of the total male pollable population. The overall tendency for the royal burghs to have higher proportions of wealthier inhabitants and the smaller to have very few or none is hardly surprising. It must, however, be remembered that many poor inhabitants may have been omitted from the poll lists and that the proportion of these is likely to have been higher in the larger towns. The contrast in wealth between Edinburgh on one hand and Leith and Musselburgh on the other is marked, although Dalkeith, whose trade was claimed in 1692 to have been far greater than that of Musselburgh,54 seems more prosperous. Poorer still was Grangepans with only 6.1 per cent of its recorded male population in the three highest wealth categories, lending support to the burgh's pleas of poverty to parliament in 1699.55 The high figure for St Andrews relates in part to the influence of the university. The large proportions of wealthy inhabitants in Paisley and Bo'ness are more surprising and suggest that even if many of the activities in such centres were controlled by other royal burghs some of the profits at least remained in local hands.

Glasgow, Aberdeen, Paisley and Greenock had large proportions of merchants in the wealthier category while in Edinburgh and St Andrews, professional and landed wealth was more
## The Occupational Structure of Scottish Burghs

### Table 10.3: The distribution of urban wealth

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<tr>
<td>Insch</td>
<td>9.0</td>
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<td>0</td>
</tr>
<tr>
<td>Port Glasgow</td>
<td>13.8</td>
<td>8.3</td>
<td>5.5</td>
</tr>
<tr>
<td>Kilmacolm</td>
<td>4.5</td>
<td>4.5</td>
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</tbody>
</table>

Source: SRO, MSS Poll Tax Returns.

significant. Bo’ness, by contrast, had a higher proportion of wealthy tradesmen than most towns, though Paisley and Perth also came out well in this respect.

Edinburgh might have been expected to have had the highest overall proportion of wealthy men but this was not the case. The far greater range of wealth in the capital must be remembered though; if the thresholds for stock among merchants and tradesmen had been 50,000 merks rather than 10,000 the picture would
The Occupational Structure of Scottish Burghs

probably have been very different. People in the higher wealth categories occur only sporadically in the smallest burghs, being most commonly merchants with barely 500 merks of trading stock. Such centres contained few tradesmen of substance and few professional people.

The functions and regional impact of Edinburgh

It has already been suggested that the occupational classification used in the poll lists may under-emphasise specialist occupations. Nevertheless, Table 10.4 presents a list of some of these for the larger burghs. The presence of an array of luxury trades in the capital distinguishes it from regional centres such as Aberdeen and Perth, although it must be remembered that the data for Glasgow are incomplete, relating only to the higher wealth categories.

The strength of the printing, bookselling and wigmaking trades emphasises the capital's role as a centre of education, culture and fashion. It is not suggested that such activities were absent elsewhere, merely that they existed as small-scale adjuncts to more basic occupations. In Edinburgh, however, the level of demand was sufficient to sustain them as full-time occupations. Outside Edinburgh and, possibly, Glasgow, the occupations listed in Table 10.4 were represented only sporadically, if at all. Even Aberdeen had less than half the specialist occupations of Edinburgh and most other large burghs had only one or two. Leith, as Scotland's largest port and a satellite of Edinburgh, had more specialist functions than Perth.

Edinburgh also affected the occupational structures of other burghs within a radius of twenty miles or more. Leith, Musselburgh, Bo'ness, Dalkeith and Grangepans were deficient in professional occupations and merchants, had fewer people in the higher wealth categories, and had high proportions of their workforces in manufacturing. The control of the economies of Bo'ness and Grangepans by Edinburgh merchants is attested by other sources. The importance of Dalkeith as a market centre depended largely on its proximity to Edinburgh. The occupational structures of Dalkeith and Musselburgh suggest that their manufacturing activities were also closely tied to the Edinburgh market, furnishing products which were either consumed or finished there. Due to the dominance of the capital these towns had failed to develop regional or subregional roles involving the
<table>
<thead>
<tr>
<th>Occupation</th>
<th>Edinburgh</th>
<th>Glasgow</th>
<th>Aberdeen</th>
<th>Musselburgh</th>
<th>Leith</th>
<th>Perth</th>
<th>Bo'ness</th>
<th>Dalkeith</th>
<th>Paisley</th>
<th>Greenock</th>
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<td>Armourers</td>
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<td>Bookbinders, booksellers, stationers</td>
<td>40</td>
<td>2</td>
<td>7</td>
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<td>3</td>
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<td>1</td>
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<td>46</td>
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<tr>
<td>Scissors and cutlers, surgeons and</td>
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<td>6</td>
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<td>Tobacco cutters, spinners and sellers</td>
<td>2</td>
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<tr>
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Note: Only data for higher wealth categories available for Glasgow.
Source: SRO, MSS Poll Tax Returns.
provision of higher-level services and manufactures. Unfortunately, data were not available for Linlithgow and Haddington to determine whether their balance of occupations was also influenced by Edinburgh. Only Bo’ness was, in some respects, different. While its economy was linked with Edinburgh, which provided an important market for its coal and salt, it had a considerable export trade in its own right, even if much of this was controlled by merchants from other royal burghs. Bo’ness was an upstart baronial burgh which had grown through industry rather than by the provision of services for the surrounding countryside. Its success is shown by the large proportion of tradesmen in the higher wealth categories. Its economic base, along with that of Grangepans, differed from that of the other burghs studied but, were data available, it is probable that Prestonpans and some of the Fife and Ayrshire coal and salt burghs would have presented a similar picture.

The Scottish urban hierarchy

The centres studied here are selected by the chance survival of the evidence and do not form a random sample of the Scottish urban hierarchy in the late seventeenth century. Nevertheless, it is instructive to examine some of their hierarchical characteristics. A rank correlation of +0.74, significant at the 0.05 per cent probability level, exists between the pollable population of the burghs studied and their dates of foundation. The smallest centres were, by and large, latecomers — post-1660 burghs of barony and non-burgthal market centres. The ancient royal burghs and pre-seventeenth century baronial burghs formed most of the large centres in this group.

The exceptions to this pattern were Bo’ness and, to a lesser extent, Greenock and Newark, all post-1660 foundations whose growth was based on new, dynamic elements in the Scottish economy: the coal and salt trade in the case of Bo’ness, the expanding west-coast and incipient trans-Atlantic trade in the case of the Clyde burghs. At the other end of the scale were declining royal burghs like Anstruther Wester, whose burgesses in the late 1680s were petitioning for a reduction in taxation as the burgh was ‘past all hopes of having trade in tyme coming’. The burgh was situated in an area where competition from other market centres was intense. Inverurie, dominated by Aberdeen, was in a similar position.
The Occupational Structure of Scottish Burghs

How many of these centres were truly urban? Too much attention has been paid in the past to institutional factors in the development of Scottish burghs. The present study indicates the importance of occupational characteristics in determining urban status. In assessing the functions performed by various centres a distinct break occurs at between 250 and 300 pollable persons, corresponding to a population of perhaps 450 or 500. Burghs at this level, such as Peterhead and Fraserburgh, had a complete range of professional services, a merchant community and all the major branches of manufacturing. Below this level the range of functions diminishes rapidly and the twenty-two smallest centres cannot be considered as urban, most of them performing functions which in areas of nucleated rural settlement would have been discharged by villages.60

Uniformity or diversity?

In summary, distinctive elements of specialisation within the Scottish urban hierarchy can be identified, even with the limited sample of burghs studied. These elements can be demonstrated at two levels — at a general one in terms of variations in the importance of different types of activity, and more specifically within the manufacturing sector. The most marked overall specialisation was that of Edinburgh in high-level professional services, indicating how profoundly its position as the capital differentiated it from other burghs. Aberdeen, and to a lesser extent other regional centres, were also relatively strong in these functions. Aside from the importance of the professional groups the larger royal burghs had, characteristically, a reasonable balance between trading, manufacturing and lower-level services. Merchants formed an important group not only in larger royal burghs like Aberdeen but also in some smaller baronial burghs like Fraserburgh and Greenock, though the contrasting roles of the two types of centre with regard to overseas and internal trade and the differences in the scale of operation of many of their traders should not be forgotten. High levels of specialisation in trading, including people involved in shipping as well as merchants, was a feature of rapidly-growing coastal baronial burghs like Bo’ness and Greenock. In older baronial burghs like Fraserburgh the concentration of merchants may relate to the town’s distance from Aberdeen and point to its having had an important subregional role in distribution.
Greenock, with a lack of professional services and little manufacturing, appears to have had an unbalanced occupational structure with the expansion of shipping-related activities outstripping the growth of other sectors. There were no clear differences in the importance of manufacturing to distinguish the larger royal burghs from baronial burghs. Fishing could generate high levels of specialisation in smaller coastal centres.

At a lower level there were marked elements of specialisation within the manufacturing sector. Among the larger burghs this included textiles in Musselburgh and Paisley, leather in Selkirk, glovemaking in Perth and food and drink in Perth and Bo’ness. Woodworking and construction was particularly significant in the ports. Burghs rarely showed a marked concentration in both trading and manufacturing, pointing to the home-based nature of the demand for most Scottish products. The industrial specialisations which have been identified in baronial burghs like Dalkeith, Musselburgh and Paisley also suggest that close economic ties existed between different types of burgh at regional and local levels and it may be a mistake to view the rise of some of the larger baronial burghs in the later seventeenth century as automatically posing a threat to the old-established royal burghs. The activities of the two types of centre may well have been more closely integrated and complementary than has sometimes been appreciated. At a smaller scale, elements of specialisation in the minor centres emphasise their purely local role as foci for making up raw materials derived from the surrounding area and in distributing goods produced or imported by larger centres.

The findings suggest that the general occupational structure of Scottish burghs at this time was similar to that of English towns. The primary function of most burghs was to act as generalised central places at different scales for their rural hinterlands. Elements of specialisation did exist but there were no one-industry towns. It has been suggested by Clarkson that half a dozen groups of crafts and manufactures — textiles, clothing, leather, metalworking, construction, food and drink — dominated the workforce of English towns.61 Patten, following Hoskins, believed that these industries accounted for up to two-thirds of the urban workforce, leaving only a third for the professions and elements of specialisation, such as shipbuilding, which were grafted on to a basic superstructure of occupations which was common to all towns.62 The present study suggests that the importance of these groups has been over-emphasised. Clarkson’s categories, and those of Patten
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and Hoskins, conform closely to the manufacturing sector defined here. In the fifteen largest burghs studied this group made up on average only 40 per cent of the pollable male workforce and only approached two-thirds in Paisley and Perth. It is probable that previous studies have underestimated the importance of domestic servants and, secondly, of labourers and workmen, two groups which were numerous in many burghs. In addition, the dominance of port-related functions in coastal towns may not have been fully appreciated. While none of the burghs studied were one-industry or even one-activity towns there was greater scope for diversity and specialisation than might have been expected and this in turn argues for a higher degree of sophistication in the Scottish urban system than has sometimes been suggested.

Conclusion

This survey, based on a single source with manifest imperfections, serves only as an introduction to a complex topic. As such it perhaps poses more questions than it answers. Nevertheless, it has emphasised some important aspects of the occupational structure of Scottish burghs in the late seventeenth century. Marked differences between individual towns reflect important contrasts in function within the urban hierarchy. Some of these differences can be attributed to the dichotomy within the Scottish burghal system. Royal burghs still clearly exerted influence over the activities of baronial burghs. The nature of these controls, and the effects which they had on the burghs concerned, appear to have been articulated at a regional and local level between specific groups of centres rather than on a national scale. Thus the occupational characteristics of individual burghs can only be understood fully with reference to the regional economies within which they operated and the functions and activities of the other urban centres with which they interacted.

Other occupational differences between burghs of similar size and comparable status may be explained with reference to geographical location; the relative independence of baronial burghs like Fraserburgh and Peterhead stands in marked contrast to the dependent character of Grangepons, for example. Historical chance also played a part: the presence of the university in St Andrews made its occupational structure distinctly different from other medium-sized burghs which were studied.
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It has not been possible to give more than fleeting consideration to the ways in which the economic resources and agrarian structures of landward areas affected activities within the burghs which served as their market centres, their export outlets and their sources of imports. Nevertheless, it is clear that such factors were important in explaining elements of specialisation particularly in manufacturing but also in other aspects of urban activity.

The research presented here has been based only on the recorded occupations of pollable men. It is uncertain what proportion evaded registration or were exempted from the tax. The occupations of the lowest levels of urban society are probably under-represented here and more research using a variety of burgh records is necessary to gain a better idea of the size of this group and its activities in different towns. Equally the activities of women, apart from domestic servants, have been neglected.

The picture which has been presented is merely a cross-section through time. It would be interesting to know more about how urban occupational structures evolved from the seventeenth to the later eighteenth century. Detailed study of burgh marriage registers, where these record occupations, in conjunction with other burgh records may help to show how the socio-economic structure of the early-modern Scottish town developed in the initial phases of the Industrial Revolution. Nevertheless, it is hoped that enough has been outlined here to demonstrate something of the complexity of activities within Scottish burghs during early-modern times and to suggest some fruitful directions for further research.

Notes

1. This can be seen in recent surveys such as J. Patten, English Towns, 1500–1700 (London, 1978), P. Clark (ed.), The Early Modern Town (London, 1976), and P. Clark and P. Slack, English Towns in Transition, 1500–1700 (London, 1976).
5. The data on which these calculations have been based are contained in R. Mols, 'Population in Europe, 1500–1700' in C. Cipolla (ed.), The Fontana Economic History of Europe, vol. 2, The sixteenth and seventeenth centuries.
The Occupational Structure of Scottish Burghs


6. This is a recurring theme in a report to the Convention of Royal Burghs in 1692; see 'Register containing the state and condition of every burgh within the kingdom of Scotland in the year 1692' in SBRS, Misc. (1881), 56–156.


11. The returns for Aberdeenshire and Renfrewshire have been published: List of pollable persons within the shire of Aberdeen, 1696, ed. J. Stuart, 2 vols. (Spalding Club, 1844); D. Semple (ed.), Renfrewshire Poll Tax returns (Glasgow, 1864). Records of two of the urban parishes of Edinburgh have been published: Edinburgh Poll Tax returns for 1694, ed. M. Wood (Scot. Rec. Soc., 1951). The remaining returns are in MS in SRO, mainly in the E70 series, the catalogue for which lists the location of additional material scattered among sheriff court records and private papers.

12. SRO, E70 series.

13. The Edinburgh marriage registers, which begin to record occupations in the late seventeenth century have a greater diversity of occupational designations than the poll tax returns.


15. Ibid., 310.

16. The annuity tax of 1635 shows that 4 per cent of households in Edinburgh proper were then occupied by nobles or lairds; see Makey, Chapter 9, this volume, n. 25.


18. Ibid., 17.

19. Ibid., 16.


22. APS, X (1699), 120–1.

23. Ibid., X (1699), 115.

24. Ibid., IX (1695), 513.


26. Smout, Scottish Trade, 141.

27. Defoe, Tour, 603.


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29. The open nature of many burghs at this time is shown by the views of J. Slezer, *Theatrum Scotiae* (London, 1693).
32. Ibid., 10.
34. This is clear from the poll tax returns for the rural parishes immediately around the capital.
37. *APS*, XI (1703), 82b.
44. Ibid., 131.
46. This is also indicated by the poll tax returns for the rural parishes immediately around the capital.
47. *APS*, IX (1695), 361.
48. SRO, Buccleuch Muniments, GD 224/3, 943/15.
49. *APS*, IX (1695), 513.
50. Ibid., X (1699), 120–1.
51. Ibid., VII (1661), 465.
52. Ibid., IX (1695), 491.
54. 1692 Burgh Report in *SBRS Misc.* (1881), 58.
55. *APS*, X (1699), 115.
56. Ibid., X (1699), 115, 120–1.
58. SRO, MS Customs accounts, E72/5.
INTRODUCTION

The term 'medieval' can be interpreted in various ways. Writing this chapter in England during 1985, the 900th anniversary of the Battle of Bosworth, the conventional end of the Middle Ages in school textbooks, with the 900th anniversary of the compilation of the Domesday Book falling in 1986, it is tempting to choose such clear-cut limits for this review. When, however, one is dealing with the slow-moving rhythms of agrarian life, with economic and demographic cycles which may last for centuries, the choice of political events as boundaries can be meaningless. Nevertheless, since this chapter, relating to a period rather than to a systematic theme requires a chronological framework, one which begins in the mid 11th century and ends in the early 16th may sound more convincing than 1066 to 1485. At the beginning of this period Europe was settling down after the Viking diaspora and was about to enter a phase of expansion which peaked during the later 13th century before the onset of catastrophic decline during the 14th century. The next major upswing did not begin to gather momentum until the early 16th century by which time a variety of new influences, conventionally labelled 'the Renaissance', were starting to alter social and economic conditions. Even so, some backtracking into pre-Norman times will be necessary in considering some themes while others spill over into the later sixteenth century.

Over how wide an area the term 'medieval' has validity is also debatable. Unfortunately it is impossible within a chapter such as this to pursue the term to its geographical limits. To achieve some depth of treatment, this review will focus on the British Isles with comparative glances at continental Europe. Even within these limits the task is formidable. Selectivity has been essential and this has been accomplished by concentrating on a range of problems which have been the specific concern of historical geographers, and to which they have made significant contributions. Some topics, such as medieval
MEDIEVAL ECONOMY AND SOCIETY

rural settlement and urban morphology, are considered within a systematic framework elsewhere in this volume and have not been treated in detail here. Emphasis is placed mainly on work which has appeared within the last ten years.

Geographers interested in the medieval period have, to an even more marked degree than historical geographers in general, ignored the new approaches which have begun to penetrate the subject within the last decade. Perhaps inevitably, the Quantitative Revolution had only a limited impact on the work of historical geographers in this area as relatively few medieval sources offered scope for large-scale number crunching. The potential of computer search-and-sort packages is perhaps exciting. This approach has already been applied to the Domesday Book (Hamshere and Blakemore, 1976) and charters in the Scottish Register of the Great Seal (Doherty and Gibson, 1983). Nevertheless, this only represents technical advances in data processing within a traditional positivist approach. While historical geographers, working in a more numerate and computer-literate milieu than most medieval historians, may gain temporary kudos from demonstrating expertise in such techniques, historians will soon catch up as archaeologists have done already. There has been little attempt to re-assess the fundamental analytical frameworks within this branch of historical geography and the emphasis of published work is still often descriptive rather than analytical. The debates which have been launched within historical geography on such themes as structuralism, Marxism, humanism and phenomenology have had little impact as yet on the study of medieval economy and society. The evaluation of data sources still remains the focus of attention for many workers rather than consideration of the framework within which the sources are interpreted. Many ideas which historical scholarship has absorbed in recent years from sociology, anthropology and philosophy have barely influenced historical geographers. To be fair, many medieval historians also appear to assume that their approaches are value-free, but historians have in general been more receptive to external influences than their geographical colleagues.

A recent survey of research in historical geography, mainly within the British Isles (Whyte, 1984), shows that only a tenth of the research projects listed were concerned specifically with the Middle Ages. This has two important implications: first, with so few geographers active in this field, it is unlikely that they will make a major contribution to medieval studies. This is borne out by the present review. While the work of geographers has been highlighted here, in most areas, with the possible exception of the study of rural settlement and field systems, the frontiers of knowledge are being pushed forward mainly by historians. Second, with work on the medieval period being a minority interest, this area of research is unlikely to represent the cutting edge of
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innovation within historical geography. Indeed, almost by reverse is true, such work reflecting in miniature traditional empirical and positivist approaches which dominated historical geography until very recently (Bun 1982). In Whyte's register over half the projects are concerned with rural settlement, field systems and landscape evolution. There is comparatively little interest in topics such as population, social structure or conceptual issues like transition from feudalism to capitalism.

THE MEDIEVAL LANDSCAPE

Historical geographers have traditionally been concerned with interpreting past landscapes and studying their evolution. Landscape research is still prominent in historical geography, contributing to medieval studies. W.G. Hoskins' 'The Making of the English Landscape', published in 1955, was a milestone in the development of landscape research, a book which was at once scholarly, stylish and readable. In this respect it still stands alone. Despite the advances in landscape studies in the last 30 years Hoskins' book remains the best general introduction to its theme. Hoskins also initiated the 'Making of the English Landscape' series of county volumes which have appeared steadily since the late 1950s. The approach taken by the various authors has generally followed Hoskins' model. The quality of the series has improved through time and the more recent examples (Allison, 1977; Bigmore, 1979; Reed, 1979) demonstrate some of the ways in which knowledge of medieval landscapes has developed in the last 30 years.

Recent advances in the study of English medieval landscapes have been reviewed by Aston (1982-3) and Taylor (1980-1). It has been established that the origins of man's impact on the English landscape lie much further back, and were more complex, than Hoskins thought. Hoskins saw the origins of the modern landscape in the Saxon and medieval periods, attaching little importance to the contributions of prehistoric and Roman times. Now, however, much initial settlement and woodland clearance which was thought to have been the work of medieval man has been shown to have occurred during pre-medieval, even pre-Roman times. It is now considered that during the first millennium B.C. population was higher and the landscape more intensively exploited than at the time of the Domesday Survey. This has necessitated a re-appraisal of the significance of medieval landscape development. The idea that nucleated villages and open field systems were introduced in early Saxon times has been shown to be incorrect. There is growing evidence that rural settlement was dispersed in early and mid-Saxon England and that the change to nucleated settlement only took place later. The indications of high levels of population and intense landscape
exploitation in earlier times have diminished the scale of medieval settlement expansion and land clearance. It is now appreciated that instead of recording the start of a major phase of expansion, the Domesday Book may come near the end of a process rooted far back in prehistory. It is also clear that there was more change and less stability in the medieval landscape than was once thought. The process of settlement nucleation in late Saxon times had barely begun before new influences were encouraging a further phase of dispersion into isolated farms, hamlets and daughter villages. This evidence for rapid change should make us wary of assuming that early forms, such as field and settlement layouts, necessarily persisted with little alteration into post-medieval times. Long-term stability of this kind may well have been the exception rather than the rule. If so many elements in the English medieval landscape had their origins in prehistory one might expect this tendency to be more marked in Scotland, Wales and especially Ireland where there was more direct cultural continuity from prehistoric to medieval times. This has been reflected in a number of studies, notably those of Jones (1985) for Wales and Smyth (1982) for Leinster. Jaeger (1982) has also demonstrated interesting parallels between Ireland and Prussia both beyond the margins of the Roman Empire, where tribal territorial structures survived into medieval times.

In view of the steady flow of new ideas appearing in the journals it is remarkable that so few general surveys of medieval landscapes and their evolution have appeared since Hoskins' time. Cantor's volume (1982) is an unexciting survey which fails to emphasise new developments. Reed's collection of essays, while conveying something of the excitement generated by new research, lacks coherence and fails to define the objectives of landscape research. There is a need for a review of recent developments in our understanding of the English medieval landscape which considers techniques of landscape study, interpretations and theoretical approaches.

An encouraging development in recent years has been the greater attention which has been paid to the evolution of Scottish landscapes, a neglected theme compared with England. Parry and Slater's collection of essays (1980) marks a move away from the idea that the Scottish rural landscape was almost entirely the product of 18th and 19th century changes. Dodgshon (1981) has brought his many papers on medieval and post-medieval Scotland together into a major study of land and society. If progress in Scotland has been limited until recently, that in Ireland has been even less impressive. Aalen (1978) is more at home with Irish prehistory and his chapters on medieval Ireland are mostly reworkings of earlier published material with few new insights.
The problem with research on medieval landscapes has been its highly empirical nature and its lack of any generally accepted theoretical and methodological framework. At their worst landscape studies can be purely descriptive, with efforts being directed towards source evaluation and fieldwork rather than the processes underlying landscape change. It is easy to explain such changes by simplified influences such as population pressure without questioning the nature of man's activities and how they were reflected in the landscape. One problem with the medieval period is that documentation is rarely adequate enough to provide insights into individual motives and behaviour. We can only imagine, for example, how individual peasants saw the fields which they cultivated, and their motives in maintaining or altering their farming systems. Sometimes one can identify the work of an individual landowner in shaping the landscape; more frequently the nebulous concept of 'landlord control' is advanced to explain changes.

1977 saw the appearance of the final volume of H.C. Darby's Domesday Geography, a project which has been described as one of the most remarkably scholarly enterprises of the age. The five regional Domesday Geographies, the gazetteer and the summary volume have come to epitomise the traditional cross-sectional approach in historical geography. It may be unfortunate if some medieval historians view this as the main paradigm within historical geography. Indeed, it is important to appreciate that Domesday Book lends itself uniquely to this sort of treatment. Nevertheless, the Domesday Geographies have become standard reference works whose meticulous scholarship shows how much can be achieved by the painstaking analysis of a single major source. This does not imply, however, that the last word has been said on the geography of Domesday England or even of the Domesday Book. Recent experiments in computerising Domesday data (Hamshere and Blakemore, 1976) have shown that it is possible to extract new information and examine new sets of relationships as a result of the computer's ability to handle large bodies of information. If Darby's work has sometimes been criticised as source-bound empiricism, it is nevertheless an essential stepping stone to further analysis.

THE RURAL ECONOMY

Historical geographers studying the medieval period have continued to be preoccupied with open field systems; their origins, evolution, regional and local diversity, and eventual removal. The contribution of historical geographers to the debate on medieval field systems during the 1950s and 1960s lay mainly in the provision of case studies highlighting the regional variety of field systems rather than with more
theoretical aspects of their origin and nature. Within the last 10 years or so, however, geographers have made important contributions to these broader issues. Baker and Butlin's (1973) survey was an important landmark. Described by Baker (1979) as a stocktaking exercise, it synthesised previous research on a regional basis. Its focus was on spatial variation and the evolution of the different types of field system described. It brought out some of the shortcomings of existing work and pointed the way forward by showing lacunae in spatial and temporal coverage.

Developments in the study of field systems since 1973 have been surveyed by Baker (1979; 1983). The most important single contribution to the debate on the origins of open field systems has been that of Dodgshon. Initially he examined Scottish infield-outfield farming (1973; 1975a), stressing the importance of differences in tenure between the two main components of the system. He saw the distinction between infield and outfield as being due to a contrast between an original core of assessed land and later, un-assessed intakes from the waste (1975b,c; 1977). Subsequently he extended this work to an analysis of the origins of British field systems (1975d,e; 1978; 1980). Dodgshon believed that field systems were not designed, that the term 'system' is misleading, implying a coherence which may never have existed. Field systems were not a conscious response to particular sets of conditions, but more makeshift in their origins and development, an amalgamation of responses to various influences which were not necessarily directly related to agriculture. He stressed that field systems should be considered in the context of the total history of the communities that worked them. Field systems were not so much the deliberate creation of agrarian communities as influences on the nature of these communities. He concluded that subdivided fields arose essentially from piecemeal colonisation and the sharing out of assarts. Communal farming in turn arose as a response to the logistical problems of working subdivided fields. He saw shareholding as being important in producing subdivided fields though influences such as population growth, partible inheritance and the operation of an active land market might also have encouraged fragmentation.

McCloskey (1975; 1976; 1979) has presented a case for open fields being the result of risk avoidance by the medieval peasantry, the scattering of parcels being an insurance policy reducing losses from natural hazards. Fragmentation of land within an open field system gave cultivators diversified parcels of plots with different types of soil so that no matter what weather conditions prevailed, something would be produced for basic subsistence. Over time, as agricultural technology and yields improved, the need for dispersal was reduced and the incentives grew to consolidate and enclose land. While there is no direct evidence that medieval farmers
actually thought this way. McCloskey has developed and clarified ideas which have been implicit in much of the earlier literature on field systems. Baker (1979) has suggested that risk avoidance was a secondary consideration, an incidental advantage once the fragmentation of plots had been produced for other reasons.

Campbell (1980; 1981a,b) has also made an important contribution to the study of field systems. He has pointed out that despite the considerable body of writing on regional variations the precise nature and geographical distribution of different types of field system in England are still imperfectly known, while no generally accepted set of criteria exists for differentiating field systems. To remedy this, he has produced a functional classification of open fields within the arable-dominated parts of England which, on the basis of combinations of attributes, allows a division into five types of field system with several sub-types. In searching for the origins of regional variations in the degree to which open fields became subject to communal regulation, Campbell proposes an alternative to Thirsk’s model which influenced much of the writing on field systems in the 1960s and 1970s. Thirsk explained the development of common rights and regulations over subdivided fields as a response to pressures caused by population growth and the resulting problems created in communities where the arable area had expanded to such a degree that there was a shortage of pasture. Campbell suggests that common field systems would not have developed in periods of population pressure because it was unlikely that the cultivators would have agreed to the restrictions involved. The adoption of such regulations would have fossilised the structure of field systems into a rigid pattern whose very existence would have worked against population growth. Growing population pressure could, Campbell believes, have been countered within the structure of an irregular common field system by advances in agricultural technology such as the introduction of legumes and other fodder crops, by the replacement of oxen by horses for ploughing, or by the intensification of existing practices. His work on field systems in east Norfolk (1983) confirms that such innovations were indeed introduced. The rigidity of regular common field systems was, he argues, more likely to have developed during periods of population stagnation or decline as a response to the need to make efficient use of scarce labour resources. Under such circumstances opposition to the institution of a rigid system is likely to have been less than during a period of population growth. Lastly, Campbell has examined the direct and indirect influence of lordship in the creation of regular field systems, pointing out that the areas in which regular common field systems dominated, central and southern England, were characterised in medieval times by a high incidence of strong, undivided lordship. His
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comments on the relationships between the organisation of field systems, lordship, and the development of peasant communities as corporate entities demonstrate how recent research on field systems has been concerned with interpreting them in their socio-economic context. This approach points the way forward for further work on the inter-relationships between field systems and the societies which created them.

An example of recent progress in the study of field systems at a regional scale is the work of Harvey (1980; 1982; 1983; 1984) on Holderness, the Yorkshire Wolds. She has uncovered evidence of a widespread regularity in the layout of open fields, and the way in which land was apportioned within them. In these areas in the 16th century open fields were characterised by simple divisions into long parallel strips with few furlongs. Each furlong had a similar number of strips or lands. The oxgangs which formed the tenurial basis of the townships were organised so that each one had a land in the same position in every furlong. Their layout showed evidence of planning contrasting with the complexity and irregularity of field systems in other parts of England.

The occurrence of such regular fields over so large an area was interpreted as indicating that large-scale planning had been enforced from above by landlord control. In a few townships it was possible to show that this system had existed in the mid 13th century. The problem was to pinpoint and explain its origins and account for its survival. As the system had originated before detailed documentary sources were available one difficulty was that indirect evidence, such as the Domesday Book and archaeological data, had to be used to indicate the presence or absence of factors which might have encouraged such large-scale reorganisation. The problems of this line of reasoning have been discussed by Austin (1985). The emphasis on morphology distracts attention from the processes which created and perpetuated particular forms, and the ways in which they functioned. Absence of evidence of change can easily be interpreted as evidence of stability. Yet the more the origins of features in the medieval landscape are sought in pre-Norman times the more it becomes necessary to use evidence which is either specific to particular sites, such as archaeological data, or extremely generalised, as with the interpretation of settlement processes, and population change derived from place name evidence. One result of pushing the origins of regular field systems back before the 11th century is that the cause and effect linkages used to explain their establishment and spread become crude and oversimplified. A second result is that chronology becomes increasingly flexible, ending up with only a choice of possible periods when the field systems might have been laid out and little hope of definitive proof.

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These difficulties emerge in Harvey's work. She suggests that two important factors which might have encouraged large-scale reorganisation of field systems in the areas she studied were unity of landlord control and phases of widespread disruption possibly accompanied by temporary depopulation. A favourite period in which to place changes in the organisation of settlements and field systems in Northern England has been immediately after the Norman Conquest, in the wake of the Scandinavian invasion and William I's campaign of 1069-70. Unfortunately, for Holderness and the Wolds the supposed pre-requisite of unity of landownership did not occur at this time.

This caused Harvey to push the search for the origin of regular open fields back to the period following the Scandinavian invasions of the late 9th century when there was tenuous evidence for unity of control in this area. Similarities between the layout of holdings within the fields in this area and the Scandinavian system of sokskifte encouraged this choice. A problem with seeking such early origins was that the laying out of the new field systems had evidently been undertaken in a landscape which was already densely settled and fully exploited; the limits of the fields extended to the township boundaries in some cases and the fields themselves were sufficiently large to require no further intakes by assarting during the build up of population in the 12th and 13th centuries. However, current interpretations favour the idea that much of England, including East Yorkshire, was fully exploited but with a dispersed settlement pattern which was very different from the nucleated villages which were intimately associated with the field systems. An origin before late Saxon times thus seems unlikely. Harvey suggested that such systems had been more widespread in England at one time but that they vanished as increasing population pressure in medieval times led to the subdivision of existing fields and the assarting of more land.

Support for the mid-late Saxon origin of field systems like these is likely to come mainly from excavation. Taylor (1981) has discussed the difficulties of the archaeological interpretation of remains of field systems. They are difficult to date; their occurrence under other datable features only provides a crude chronology and by their nature fields are disturbed annually by cultivation so that early forms are destroyed by the creation of later ones. Nevertheless, instances have been discovered where medieval furlong boundaries overlie Roman ditches and appear to have been aligned using them. Hall (1981) has suggested that archaeological evidence can be used to reconstruct the early forms of field systems by mapping furlong boundaries which tend to be more permanent and prominent than the ridge and furrow within them. By establishing a relative chronology of furlong boundaries in some Northamptonshire parishes he has recon-
structured an early arrangement of long strips, similar to Holderness and the Wolds. Again, he places the origins of these systems in later Saxon times.

The potential of early documentary sources, such as pre-Conquest charters, for providing information on the early landscapes, especially arable land, has been shown by Hooke (1978-9; 1981a,b) in her study of the West Midlands. The boundary clauses in late Saxon charters, analysed systematically, allow spatial differences in the intensity of cultivation, and something of its nature, to be reconstructed and explained. Her work has suggested that in some areas the high level of intensity of agriculture in late Saxon times reflects a pattern of development which was already evident during the Roman period.

Many problems associated with the origins and development of open field systems mirror those of settlement morphology. It has often been too readily assumed that regularity could only have been imposed from above, not generated from below. It has also been taken for granted that a single landowner had to dominate an area for regular forms to be widespread. The possible role of fashion, imitation and the diffusion of ideas has often been ignored. Perhaps the greatest problem with recent work on field systems, as Dodgshon (1979) has emphasised, is that research has produced increasing numbers of detailed case studies, and now a variety of theoretical standpoints, without making much real progress. There has been a proliferation of ideas instead of a convergence of viewpoints. This is evident in the essays edited by Rowley (1981). Rowley at least is optimistic that despite the lack of consensus, a good deal of important new research is being undertaken. Nevertheless, it is clear that some of the theoretical work of the last ten years, notably that of Dodgshon himself, has encouraged consideration of the origins, evolution and diversity of field systems in a broader context, so that there is now a more active dialogue between the more abstract and the more empirical research in this area.

Medieval historians have long accepted that short runs of severe weather conditions had large-scale effects on society causing crop failures, livestock mortality and famines. Geographers and economic historians have continued to study the effects of weather on medieval agriculture (Dury, 1981; Hulme, 1984). Historians have been less convinced of the influence of longer-term climatic changes on medieval society. This has been due partly to the lack of detailed, accurate chronologies of climatic variations during medieval times and a failure by many historians to understand the mechanisms which produced them. In addition, the deterministic interpretations of the effects of climate on man put forward by some geographers earlier this century have helped to discredit this approach. The problem with relating climatic
variations to socio-economic changes is to establish clear cause-and-effect linkages which filter out other influences. Parry (1975; 1976a,b; 1978) has made an important contribution to solving these problems. His argument has been that it is necessary to focus on areas of marginal settlement and agriculture where the effects of climatic shifts, amplified with small increases in altitude in the maritime environments of N.W. Europe, were likely to be particularly significant and easy to identify. Using a case study from South East Scotland, he demonstrated that remains of cultivation and associated settlements occurred at altitudes which, under present climatic conditions, would not allow even the hardiest of crops to ripen in most years. Using cartographic and documentary evidence Parry produced a chronology of settlement and land abandonment in this area from medieval times onwards. The medieval climatic optimum coincided with an expansion of cultivation to high altitudes. Parry showed that during this optimum, temperature, exposure and soil moisture conditions would have allowed subsistence crops of oats, with an acceptable probability of failure, in all but the highest parts of this area. The subsequent late-medieval climatic deterioration was accompanied by a retreat of settlement and cultivation. Parry did not claim that climatic change was the sole cause of this, but he did suggest that the increasing probability of harvest failure at a given altitude was an important background factor encouraging permanent abandonment when other proximal causes made cultivation more difficult. This restrained and cautious interpretation has pointed the way forward for work on settlement changes in marginal areas and Parry has refined his theoretical approaches to the study of the links between climatic change and human events (1981). Other studies have used behavioural approaches to identify structural weaknesses within medieval societies to determine whether they allowed adaptability or caused inertia in the face of climatic stress. A notable contribution in this field has been McGovern's (1981) analysis of the failure of the medieval Norse Greenland colony.

POPULATION AND RURAL SOCIETY

The secular patterns of population change during medieval times are reasonably clear for Western Europe as a whole, but at a smaller scale there are problems in reconstructing population distribution, trends and characteristics at regional and even national levels. Population figures for individual countries are only estimates based on non demographic data like the Domesday Book, the Hundred Rolls or the 14th century Lay Subsidies. If estimates of the population of a comparatively well-documented country like England can vary
by 100% using the same source (Dodgshon, 1980), the figures for more poorly recorded countries like Scotland or Ireland are pure guesswork, based largely on backward projections from later periods. Although for England absolute population densities are uncertain, relative variations can be established from a number of sources though problems of interpretation may cast doubt on the scale of such differences; for example between the south and east of England and the north and west in 1086 (Dodgshon, 1980). The vital importance of population fluctuations as a major influence on the economy has long been appreciated and this tradition has been continued in studies such as that of Hatcher (1977) on population change and the English economy in the later Middle Ages. The role of epidemic disease is, inevitably, prominent in studies of late medieval demography and the crisis of the Black Death has continued to exert a grim fascination, whether in general studies such as that of Gottfried (1984), or regional ones like that of Shirk's (1981) for Aragon.

While surveys like the Domesday Book and the lay subsidies can provide indications of relative, though less certainly of absolute, spatial variations in population density, it is more difficult to determine the extent to which regional and local trends departed from the national picture. In the period before the later 16th century when parish registers first become available in some quantity, sources for smaller-scale demographic studies become even more scanty and indirect than for the early-modern period. Manorial court rolls provide surrogate data on population changes at the level of the village community but regional patterns are more difficult to establish.

Medieval surveys can also show spatial and temporal changes in the geographical distribution of wealth. This has been attempted for England by Darby et al. (1979) using three cross sections; 1086, 1334 and 1524-5 with a framework of small geographical units. The resulting maps allow changes in the pattern of wealth between the three surveys to be assessed. The patterns of change for the two periods are markedly different. Between 1086 and 1334 the most substantial increases in wealth occurred in the Fenlands, those parts of Northern England which had been devastated by William I in 1069-70, and areas of late colonisation of marsh, woodland and upland. Between 1334 and 1525 the growth of wealth mainly reflected the expansion of the textile industries in areas like the South West, Essex, Suffolk, and parts of the West Riding. Areas which had a steady increase in wealth throughout the two periods included London and its environs, larger towns like Bristol and Coventry and some rural areas like the Weald. This research has produced a framework for further inquiry at a more detailed level but it has been criticised by Stanley (1980) who warns of the dangers of...
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using three such widely-spaced sources produced under different circumstances, for different purposes.

One of the most important recent advances in the study of medieval demography and society has been the growth of detailed reconstructions of small communities using nominal linkage analysis of manorial records. This has occurred at a time when links between historical demography, sociology and anthropology have become closer, and the need to link population characteristics to their socio-economic context is increasingly appreciated, along with the realisation that technical sophistication in handling population data needs to be matched by the use of appropriate theoretical approaches.

Within the last 20 years detailed work on the nature of early-modern European society has focused on themes such as family and household structures, the distribution of wealth, inheritance customs, community relations and geographical and social mobility. These themes have been pushed back into medieval times, adapting to different problems and sources in the process. Few documentary sources offer the opportunities for detailed community reconstruction like the material used by Le Roy Ladurie in his study of Montaillou in the Pyrenees (1976) but increasing use of more generally available sources has opened up many new possibilities. Macfarlane (1977) has shown that the amount of information which can be assembled about ordinary people in early-modern times is surprisingly great. It is now appreciated that medieval peasant societies are also better recorded than has often been appreciated, particularly in England. Manorial court rolls provide information on many aspects of community relations including demography, kinship and neighbourliness, debt and credit, crime and violence, and population mobility. Earlier studies of medieval communities used manorial court rolls in a generalised, anecdotal way. More recently there has been a veritable explosion of research and writing on medieval peasant societies integrating manorial records at the level of the village or estate. Much of this work has drawn on sociological and anthropological theory as well as quantitative analysis. Marxist historians have made an important contribution, notably Hilton's work on the peasantry of the west Midlands (1966; 1975).

Another major focus of research has been the Pontifical Institute of Medieval Studies at Toronto. Under the leadership of Raftis a number of community studies have been undertaken, notably by Britton (1978), Dewindt (1972) and Raftis himself (1974). Other community studies have been those of Harvey (1977) for the Westminster Abbey estates, Howell (1983) on Kibworth Harcourt, Dyer (1980) on the estates of the Bishopric of Worcester, and Razi (1980) on Halesowen. An important contribution has been that of Smith (1979; 1983). Other aspects of medieval society which have been examined include birth control (Biller, 1982), family structures

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(Herlihy, 1983), and household composition (Hammel, 1980; Ring, 1979). Goody et al. (1976) have edited an important collection of studies on family and inheritance in Western Europe from medieval times onwards. There have also been notable advances in the study of geographical mobility using evidence such as place-name surnames (McClure, 1978-9). Earlier ideas that medieval rural society was relatively static have been replaced by the realisation that considerable mobility occurred. Field (1983) has examined this theme using an English case study, MacPherson (1984) using one from Scotland and Angers (1979) a French example.

In recent years historical geography has been influenced by Marxist theories of social and economic change. In the context of the medieval period Marxist research has focused on the structure of relations within feudal society and the nature of the transition from feudalism to capitalism. There has been considerable debate among Marxist historians over the nature of this transition. Marx himself was principally concerned with analysing capitalism and only sketched out his ideas regarding the structure of feudal society and the ways in which the transition to capitalism occurred leaving plenty of scope for debate. The early work of historians on the transition has been summarised by Hilton (1976). More recently, contrasting views on the transition have been put forward by Hindess and Hirst (1975) and Martin (1983).

Traditional interpretations saw the genesis of capitalism taking place within the towns. Many Marxist historians believe, however, that capitalism arose in the countryside out of forces operating within the feudal system rather than from influences imposed from outside rural society. Marx considered England to be the classic example of the development of agrarian capitalism and the debate has been widened recently within a European context by Brenner (1976; 1982). Brenner suggests that capitalism developed out of agrarian society in England because of the lack of a large class of peasant landowners and the existence of strong landlord control over rents. In other parts of Europe, notably France, such a transition was inhibited by the importance of peasant owner occupiers and inheritance strategies which produced fragmentation of ownership.

Brenner's arguments were designed to counter not only the traditional Pirenne model which stressed the importance of towns and trade in promoting capitalism but also models based on demographic influences which explained economic trends in terms of the external, independent variables of fertility and mortality. Brenner's first paper provoked a lively debate with contributions from Postan and Hatcher (1978) and Le Roy Ladurie (1978) who were among the principal exponents of the demographic theory. Brenner saw the emergence of the classic landlord-capitalist, tenant, wage labourer structure in England as the key to the transformation of agriculture and
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rural society, encouraging investment and innovation by both landlords and tenants with the creation of a rural proletariat divorced from the land. Much of the recent research on the socio-economic structure of late medieval and early-modern Britain tends to support Brenner's thesis. On the other hand, it has been suggested that landlord-tenant-wage labourer structures existed elsewhere without producing the same effects; in parts of France for example (Cooper, 1978).

The strains which existed within feudal society, especially conflict between landlord and peasant, have continued to be a focus of attention. At a macro-scale medieval peasant revolts have been studied by Hilton (1973) and Hare (1982) for England, Blickle (1979) for Germany and by Fourquin (1978) and Francois (1974-5) at a European scale. Charlesworth (1983) has provided a geographical perspective on rural rebellions in Britain at the end of the Middle Ages. He has examined early 16th century rural protests and the degree to which they can be considered as part of the traditional feudal antagonism between lord and peasant, or as a reaction to the rise of agrarian capitalism. More recently attention has turned to the study of medieval crime at a smaller scale. Stone (1983) has considered the changing nature of violence in English society from the 14th century onward. Urban crime has also been analysed by Hammer (1978) for Oxford, Cohn (1980-1) for Florence and Blanshei (1982-3) for Bologna.

TRANSPORT AND COMMUNICATIONS

As Hindle (1982) has pointed out, much has been written about medieval trade, but comparatively little attention has been given to roads and road transport. The better documentation relating to international and seaborne commerce has lured economic historians and historical geographers away from the more mundane, but arguably more important, patterns of regional and local trade. The growth of the medieval economy and the increase in population between the 11th and 14th centuries must have greatly increased traffic on existing roads while the pioneer colonisation or re-settlement of marginal areas must have led to the creation of new road networks. Much of what has been written on roads has been anecdotal, concentrating on how badly they were maintained, and the difficulties and dangers involved in travelling them. Labarge's (1982) study of medieval travellers continues this tradition. This is largely due to lack of evidence and as a result many histories of road transport treat the medieval period as a brief, unimportant interlude between the Roman period, supported by abundant archaeological evidence, and early-modern times, when better documentation becomes available. Taylor (1979) has provided a guide to the physical
remains of medieval roads. Other archaeological evidence can be used to establish the antiquity of a route as Hooke (1976-7) and Steane (1983) have shown. The problem is that medieval roads were worn by use rather than being constructed and so are difficult to date as visible features on the ground may have developed over a long timespan, though some roads in areas like the Fens were deliberately constructed. Nevertheless, landscape evidence only provides information on limited, disjointed stretches of road, often in association with other kinds of features such as deserted settlements.

For the reconstruction of road networks on a larger scale, documentary sources are essential. Hindle has made an important contribution to the study of medieval road networks at a national scale using cartographic sources (1976; 1980; 1982). The legacy of the Roman road system is clear with some 40% of the routes shown on the Gough map of c1360 being on the line of Roman roads. At a more detailed level he has demonstrated the potential of combining documentary material with field evidence in studies of medieval road networks in Cumbria (1977; 1984) and Cheshire (1982). The difficulty of reconstructing medieval road networks at this more detailed scale emerges from Hindle's study of roads in medieval Cumbria (1984). All that the documentary evidence allows one to do in many cases is to locate the centres of power and authority, such as castles and monastic houses, and to postulate the links which might have existed between them and their dependent settlements. Although roads are mentioned in charters and other documents such references are generally sporadic and are of little use in reconstructing more general patterns of movement, although they may allow one to establish the line of a medieval route at a specific locality. In the study of medieval transport, he has also examined the seasonality of movement (1978), while Langdon (1984) has made important claims for a revolution in vehicle transport in the 12th and 13th century with a change from oxen to horses.

TOWNS

Since developments in the study of urban morphology will be considered in Chapter 9, this section reviews recent work on other aspects of medieval towns. Despite the growth of urban history in recent years, less attention has been paid to economic and social aspects of medieval towns in Britain than for later periods. Many studies have focused on individual towns and have lacked the broader, comparative perspective which has been characteristic of recent work on early-modern towns in Britain.

The origins of medieval urban development have been a fruitful area of investigation, encouraged by growing numbers
of excavations of medieval town centres since the 1960s (Clarke, 1977; Brooks, 1977). On a European scale the best recent survey of medieval urban origins is Barley (1977) in which the question of continuity of urban functions from Roman to medieval times is considered in the context of Britain, France and the Western Mediterranean. French (1983) has also discussed urban origins in medieval Russia while Carter (1983) has provided an introduction to the diffusion of urbanisation in medieval Europe reviewing the various theories of urban origins. The shadow of Henri Pirenne still looms large over much of this work. His influence is discussed by Hodges (1982) who has developed a new approach based partly on recent archaeological discoveries. Instead of being a period of economic stagnation as a result of declining long-distance trade, Hodges re-interprets the 9th and 10th centuries as a time of urban growth stimulated by exchanges at regional and local rather than international levels. His approach to the place of towns in the early medieval economy derives much of its inspiration from anthropology and provides a refreshing new perspective on an established theme. In England the question of continuity of urban functions from Roman to early medieval times has been long debated but greater emphasis is now being laid on the late Saxon period as an important formative phase in urban development, helping to establish a framework around which the later expansion of urban centres in medieval times was organised. The importance of this period has been considered by Aston and Bond (1976), Reynolds (1977) and Radford (1978).

In Scotland, without Roman towns, large Viking trading centres, or planned Saxon burghs, it is still acknowledged that the introduction of planned towns in the twelfth and thirteenth centuries by incoming Anglo-Norman landholders represented a revolution in settlement and economic activity. Nevertheless, current research now places greater stress on the existence of early forms of urban life before the 12th century, providing a basis for the more dramatic and sweeping development of medieval burghs (Dicks, 1983). In Ireland comparatively little research has been carried out on medieval urban origins but recent work has again emphasised the importance of Norse coastal trading centres from the 9th century, as well as the proto-urban nuclei provided by the principal Early-Christian monastic foundations. The origins of urbanisation in medieval Ireland have been discussed by Butlin (1977) while Graham (1979) has analysed the distribution of medieval Irish boroughs with a model showing how urbanisation occurred.

Although much of the work of historical geographers relating to medieval towns has concentrated on urban morphology, there has been continuing interest in the development of urban hierarchies. This is exemplified by Slater
(1985) who has used the early 14th century lay subsidies to reconstruct the urban hierarchy of Staffordshire. By combining different subsidies he has shown the discrepancies which occurred between rankings by wealth and population size. He has also investigated the potential of the subsidies for studying migration patterns and urban occupations using surname evidence. Fox (1981) has used the taxation lists of the Scottish royal burghs to show how the urban hierarchy developed from a primitive system in the 14th century to a more sophisticated one three centuries later. The role of smaller medieval market centres has been considered by Unwin (1981) who draws interesting parallels between periodic market systems in medieval Nottinghamshire and modern underdeveloped countries in order to explore the functional role of the former. The reasons behind the proliferation of market centres in the 13th and 14th centuries have been considered by Britnell (1978; 1981) while Hilton (1984) has examined the social structure of small medieval market centres in England. Surveys for Scandinavia, the Slav countries, Russia and North West Europe are given in Barley (1977).

Recent developments in the study of medieval urban society in England have been reviewed by Platt (1976) and Reynolds (1977). Research on the social structure of medieval towns has tended to focus on the period from the 14th century onwards when documentation becomes more abundant. Among economic historians there has been a vigorous debate concerning the existence, nature and scale of a late medieval urban decline in England caused by a fall in population and consequent economic contraction, as well as changes in patterns of economic activity such as the movement of the textile industries from the towns to the countryside on a significant scale. The decline has been dismissed by Bridbury (1975; 1981) who takes an optimistic view based on statistics derived from the lay subsidies of 1334 and 1524-5 which demonstrate a steady growth of urban wealth. Bridbury's interpretation of the subsidies and the validity of his statistics have been questioned by Rigby (1979). The opposite view, that urban decline was widespread in England at this time, has been vigorously expressed by Pythian-Adams, who has produced an analysis of conditions in late-medieval Coventry (1979a) and a general review of the problem (1978) in which he suggests that the decline began as early as 1300 and continued with little interruption into the 1570s. Dyer (1979) has attacked Pythian-Adams' theory of general decline, casting doubt on his interpretation of many types of evidence suggesting that towns were experiencing economic and social problems on a grand scale. While acknowledging that some towns such as Coventry undoubtedly underwent a long-term decline, Dyer suggests that the general pattern was one of periods of short-term difficulty for individual towns, often balanced by economic growth elsewhere. In a reply to this
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critique, Pythian-Adams (1979b) has accused Dyer of pursuing a 'neutralist textbook orthodoxy' and remains unrepentant. Much of the fuel for this debate has been generated by a lack of agreement over basic terminology, in particular what is meant by 'decline' and 'decay' in this context. The linkages between population change, economic fluctuations and urban societies have often been assumed rather than demonstrated. Growth of population and of urban wealth were not necessarily positively correlated, nor was economic growth in the countryside and in the towns always closely linked although Dyer (1979) believes that given the small proportion of the population living in towns at this period, it is unlikely that a general urban crisis could have occurred when the indicators for the economy as a whole were fairly healthy. Reynolds (1980) has suggested that a more rigorous framework of hypothesis testing is needed to evaluate the various claims and counter claims. Many of the generalisations which have been made about urban decline have been based on a limited number of case studies. Amongst the more notable of these have been Palliser's study of York (1978), Saul's of Great Yarmouth (1982) and Rigby's of Grimsby (1984). Both sides of the debate have been reviewed by Reynolds (1977; 1980). More detailed studies of individual towns are required with careful evaluation of the statistical sources as well as more qualitative evidence for decline.

Historical geographers have directed comparatively little attention to the study of urban social patterns in medieval times by testing the contrasting models of residential location in pre-industrial cities suggested by Sjoberg and Vance. The validity of these models has been discussed by Langton (1975) in the context of a case study of Newcastle. Langton concluded that the social geography of Newcastle was more complicated than either model, resembling in some respects a hybrid of the two. The scope for extending this work further back into medieval times is considerable. Overall, there has been an unfortunate gap in urban history between medievalists and early-modern specialists, each using different sources and considering different problems. Although the sources for reconstructing urban societies and economies undoubtedly improve through time, it is really in the 14th rather than the 16th century that records first become fairly abundant (Reynolds, 1977); more detailed studies of change in individual towns spanning the late medieval and early modern periods would be advantageous. An example of how much information can be assembled about an individual, even at a fairly early date, is Donnelly's (1980) study of Thomas of Coldingham, a merchant of Berwick upon Tweed in the late 13th century.

Research into medieval urban development in other parts of Britain continues to lag behind that in England and has
concentrated more upon morphological aspects. This can be seen by the lack of new perspectives on medieval burgh society in Adams' survey of Scottish urban development (1977). The treatment of medieval towns in Gordon and Dicks' (1983) volume on Scottish urban history also concentrates on the physical character of the medieval burgh rather than its socio-economic structures. Equally, Butlin's survey of Irish towns (1977) demonstrates the need for more detailed research on urban society and for broader, more comparative perspectives.

CONCLUSION

Within the limited space available it has only been possible to review certain aspects of recent progress in the study of the medieval economy and society. Attention has been focused on some of the areas where historical geographers have made a significant contribution within the last decade, or where it is considered that they may be able to bring their expertise to bear on particular problems in the future. The indications are that geographers studying the Middle Ages are slowly beginning to respond to paradigm shifts within geography, moving away from mere description and a narrow preoccupation with source evaluation towards more theoretically-based approaches. There will always be a place for the positivist tradition. Nevertheless, the way ahead is clearly for historical geographers to recognise that their work cannot be value free and that blind unquestioning adherence to a particular approach is limiting, denying them the excitement and the challenge of a range of alternative theoretical standpoints.

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MARRIAGE AND MOBILITY IN EAST LOTHIAN IN THE SEVENTEENTH AND EIGHTEENTH CENTURIES

by IAN D. WHYTE

In recent years the belief that Scotland’s population during the sixteenth, seventeenth and early eighteenth centuries was largely immobile and static has been substantially modified. Research has shown that, far from passing their lives within the confines of a single small community, people changed their place of residence frequently though often over fairly limited distances; commonly a day’s walk. In this Scotland conformed to the pattern which has been established in England and much of Western Europe. Mobility in Scottish society took many forms; for example, the movement of male and female servants from one farm to another at the end of their short contracts, the seasonal flows of casual labour from the Highlands to help with the Lowland harvest, the migration of men and women from the countryside to the towns in search of opportunities, and the less purposeful driftings of the vagrant poor. Although families often changed their residence much of the mobility was associated with people who were young and single, and the change of residence which two people made when they got married was often one of the most important moves of their lives.

Patterns of mobility at marriage have been studied for a number of communities in England and on the Continent, although little research has so far been carried out on Scotland. The attractiveness of marriage registers is that they provide a widely available and easily utilised record of population movements at all social levels, albeit of a rather specialised character. However, the distances over which people interact during courtship also provide a good indication of the general level of mobility within a society. At all periods people with more money or higher social status have tended to look further afield for their marriage partners than people in the poorer levels of society.
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because their horizons were wider and, as most marriages tend to involve people from similar social backgrounds, because of the limited choice of potential partners close to home. In most pre-industrial societies the majority of marriages involved contacts over very limited distances. Previous work on England has suggested that patterns of marriage mobility for the bulk of rural society did not change significantly before the late nineteenth century. It has been argued that until this period contacts by ordinary country people had to be made and maintained largely on foot and it was only the development of cheap forms of transport; the railway, the bicycle and later the motor bus, and the achievement of near-total literacy, which increased day-to-day personal mobility and widened individual horizons.

During the eighteenth century Scotland witnessed tremendous changes in her society and economy. In the second half of the century Scotland's population was growing at an unprecedented rate. By 1800 agricultural improvement was proceeding at a rapid pace throughout the Lowlands, while the expansion of industry in the larger towns and their environs was providing employment for the growing numbers of people who could not find work on the land. The spread of turnpike trusts was greatly improving road transport on the main routes though country roads were often still badly surfaced and difficult, while harbour improvement schemes, large and small, were facilitating coastal transport. More commercialised farming meant more regular contacts by the rural population with local and regional market centres. The parish descriptions in the Statistical Account, written in the closing years of the eighteenth century, are filled with examples of population movements; from Scotland to North America, from Highland to Lowland, from the countryside to the towns within the countryside to the planned estate villages which were being established by progressive landowners. Under such circumstances one might speculate whether there was any increase in the day-to-day mobility of the bulk of the population, as reflected in marriage patterns. Marriage patterns are not the only indicators of population mobility nor do they summarise all forms of contact within and between communities, but they are one of the few pointers which can be measured accurately over long periods of time for large numbers of communities. The rapid commercialisation of the rural economy and the phasing out of traditional patterns of agriculture began earliest in East Lothian and had made more progress here by the end of the eighteenth century than in other parts of the Lowlands. If any significant changes did occur in patterns of marriage mobility as a result of the rapidly accelerating social and economic changes then East Lothian is one of the most likely areas in which to look for them. This article attempts to assess whether, in fact, there were any
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identifiable changes in patterns of marriage mobility in East Lothian between the seventeenth and the end of the eighteenth century.

To investigate patterns of marriage mobility in the county during this period the marriage registers relating to a group of twelve parishes were chosen. These comprised the urban parishes of Haddington, Inveresk and Prestonpans, and the rural parishes of Aberlady, Athelstaneford, Bolton, Dirleton, Gladsmuir, Ormiston, Pencaitland, Saltoun and Yester. Together these parishes formed a block of country spanning East Lothian from north to south, from the fertile coastal lowlands to the edge of the Lammermuirs. Some rural parishes such as Athelstaneford were purely agricultural, others such as Gladsmuir and Ormiston contained a significant industrial and mining element. In all, data relating to nearly 13,000 marriages were extracted from the registers, the three urban parishes providing about 7,000 records and the nine rural ones the remainder. Unlike their English counterparts Scottish marriage registers generally record the proclamation of banns as well as, or instead of, the actual marriage. This means that brides who were marrying out of as well as into a parish are recorded, providing a better-balanced record of marriage mobility.

The marriage registers posed some problems of interpretation. Some were seriously damaged around the edges or were otherwise poorly preserved. Where this prevented a significant proportion of the entries from being deciphered the sections concerned were excluded from the analysis. Only one register, Prestonpans, contained any data for the late sixteenth and early seventeenth centuries and most of the others had gaps during the seventeenth and even the eighteenth centuries. Sometimes, particularly in the seventeenth century, registers did not indicate when partners were drawn from outside the parish and such data could not be used. Most registers were continuous for the bulk of the eighteenth century but one disturbing feature was the rise of irregular marriages towards the end of the century. In Haddington irregular marriages between 1785 and 1789 accounted for over a third of all marriages. Sometimes these irregular marriages, which were often celebrated in Edinburgh, are recorded in the East Lothian registers with the origins of the partners concerned, in which case they have been used in the analysis, but in other instances these details were lacking. Some registers did not record irregular marriages at all but their existence is hinted at by the year-by-year decline in the number of proclamations of banns towards the end of the eighteenth century.

A measure of marriage mobility which has often been used in the past, providing an indication of the relative isolation of communities, is the level of endogamy; the proportion of marriages in which both partners were resident
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within the same parish at the time of their proclamation or wedding\textsuperscript{13}. This measure has to be used with care because it is influenced by the population of the parish concerned, and those of the parishes around it. A small rural parish in which the pool of suitable marriage partners is limited may have much lower levels of endogamy than a large urban one where there is a wider choice of partners locally. The pattern of marriage endogamy for the twelve parishes in shown in Table 1. For virtually all the parishes studied the proportion of marriages in which both partners were living within the parish when the banns were proclaimed fell significantly over the period studied. For the urban parishes

<table>
<thead>
<tr>
<th>TABLE 1. PERCENTAGE OF MARRIAGES WITH BOTH PARTNERS RESIDENT IN THE SAME PARISH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban parishes</td>
</tr>
<tr>
<td>HADDINGTON</td>
</tr>
<tr>
<td>1669-75 69%</td>
</tr>
<tr>
<td>1680-99 71</td>
</tr>
<tr>
<td>1700-19 62</td>
</tr>
<tr>
<td>1720-39 65</td>
</tr>
<tr>
<td>1740-59 66</td>
</tr>
<tr>
<td>1760-79 61</td>
</tr>
<tr>
<td>1780-99 59</td>
</tr>
<tr>
<td>INVEResk</td>
</tr>
<tr>
<td>1700-19 76%</td>
</tr>
<tr>
<td>1720-39 75</td>
</tr>
<tr>
<td>1740-59 71</td>
</tr>
<tr>
<td>1760-79 68</td>
</tr>
<tr>
<td>1780-99 67</td>
</tr>
<tr>
<td>PRESTONPANS</td>
</tr>
<tr>
<td>1596-1618 71%</td>
</tr>
<tr>
<td>1687-1716 64</td>
</tr>
<tr>
<td>1788-99 52</td>
</tr>
<tr>
<td>Rural parishes</td>
</tr>
<tr>
<td>ABERLADY</td>
</tr>
<tr>
<td>1634-46 62%</td>
</tr>
<tr>
<td>1682-99 63</td>
</tr>
<tr>
<td>1700-19 58</td>
</tr>
<tr>
<td>1720-39 54</td>
</tr>
<tr>
<td>1740-59 50</td>
</tr>
<tr>
<td>1760-99 37</td>
</tr>
<tr>
<td>ATHELSTANE Ford</td>
</tr>
<tr>
<td>1660-79 50%</td>
</tr>
<tr>
<td>1680-99 38</td>
</tr>
<tr>
<td>1700-19 31</td>
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<tr>
<td>1720-39 45</td>
</tr>
<tr>
<td>1740-59 34</td>
</tr>
<tr>
<td>1760-99 44</td>
</tr>
<tr>
<td>BOLTON</td>
</tr>
<tr>
<td>1685-1719 40%</td>
</tr>
<tr>
<td>1720-59 39</td>
</tr>
<tr>
<td>1760-99 32</td>
</tr>
<tr>
<td>DIRLETON</td>
</tr>
<tr>
<td>1664-79 75%</td>
</tr>
<tr>
<td>1680-99 78</td>
</tr>
<tr>
<td>1705-39 76</td>
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<tr>
<td>1760-79 51</td>
</tr>
<tr>
<td>GLADSMUIR</td>
</tr>
<tr>
<td>1693-1719 72%</td>
</tr>
<tr>
<td>1720-32 56</td>
</tr>
<tr>
<td>1766-79 58</td>
</tr>
<tr>
<td>1780-95 51</td>
</tr>
<tr>
<td>ORMISTON</td>
</tr>
<tr>
<td>1706-19 47%</td>
</tr>
<tr>
<td>1720-39 46</td>
</tr>
<tr>
<td>1740-59 32</td>
</tr>
<tr>
<td>1760-99 34</td>
</tr>
<tr>
<td>PENCAITLAND</td>
</tr>
<tr>
<td>1698-1719 48%</td>
</tr>
<tr>
<td>1720-39 42</td>
</tr>
<tr>
<td>1740-63 43</td>
</tr>
<tr>
<td>SALTOUn</td>
</tr>
<tr>
<td>1640-79 48%</td>
</tr>
<tr>
<td>1680-99 46</td>
</tr>
<tr>
<td>1700-19 46</td>
</tr>
<tr>
<td>1720-39 40</td>
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<tr>
<td>1740-59 38</td>
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<tr>
<td>1760-99 36</td>
</tr>
<tr>
<td>YESTER</td>
</tr>
<tr>
<td>1655-99 58%</td>
</tr>
<tr>
<td>1700-39 54</td>
</tr>
<tr>
<td>1740-59 57</td>
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<tr>
<td>1760-99 43</td>
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</tbody>
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the fall was most marked in Prestonpans. The emancipation of the coal and salt workers, who comprised an important section of the population, may have been an influence behind the substantial increase in endogamy here. For Haddington and Inveresk the drop was less marked but nevertheless distinct. It is notable that the drop in the proportion of endogamous marriages occurred when all three urban parishes were growing in population, providing larger local pools of potential marriage partners.

A similar pattern occurred with most of the rural parishes although, because of their smaller populations, the proportions of marriages which were endogamous were generally lower than for the urban ones. Only Athelstaneford and Pencaitland failed to show a significant fall. The level of endogamy dropped in parishes where population grew between 1755 and 1801 (Aberlady, Gladsmuir, Ormiston, Saltoun and Yester) as well as in those in which the population fell (Bolton and Dirleton). Overall the indications are that between the later seventeenth and later eighteenth centuries the proportions of marriages involving contacts between rather than within parishes increased significantly.

Another measure which has often been used in studies of population mobility in past societies to measure the pattern of contacts between different places over time is marriage distances, the distances between the places of residence of bride and groom at the time of their marriage. Marriage distances are an important type of interaction in themselves but they are also a more general index of patterns of social contact. They can be calculated within a parish when specific details of the location of each partner are given but in the registers examined here such information was rarely recorded for more than a short run of years. When the origins of one partner lay in a different parish the actual place of residence within that parish was hardly ever mentioned. For marriages involving partners recorded as residing in different parishes the marriage distance is usually taken as the distance between the respective parish churches. This is obviously a generalisation; contact between partners from two parishes might only involve a short distance across the parish boundary while a contact within a large parish such as Haddington might extend over several kilometres. With a sufficiently large set of data, however, such discrepancies tend to average out and measurement of the distance between parish kirk and provides an acceptable substitute for the actual distances over which marriage contacts were made and maintained.

The most straightforward way of analysing changes in inter-parish marriage contacts through time is to calculate the average marriage distance for successive
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groups of years. Such averages tend, however, to be unduly influenced by the effect of limited numbers of long-distance contacts; a single marriage between an inhabitant of an East Lothian parish and a partner from, say, London, would distort the pattern of marriage distances for a group of years by raising the average substantially. The median marriage distance — the middle item of a set of marriage distances ranked in ascending order — is much less vulnerable to the influence of a few long-range marriage contacts and provides a better indication of changes in mobility among the bulk of the population. Both measures were used to highlight different elements in the patterns of mobility, along with calculations of the percentage of partners drawn from successive distance bands. The average and median distances for the 12 parishes are shown in Table 2.

The general pattern of marriage contact is similar to other past and present societies; most marriages involved partners who lived within a few kilometres of each other. In all the East Lothian parishes studied, up to 90% or more of marriages involved contact within distances of 20km or less and 80% within 10km or under, with little difference between urban and rural parishes. The table shows that for all three urban parishes there was a marked increase in the average marriage distances, especially towards the close of the eighteenth century. The increase for Prestonpans between the early seventeenth and late eighteenth centuries is particularly notable and again may reflect a marked increase in the mobility of colliers and salters. There is also a smaller but significant increase in the median distances for these parishes. Clearly there was an increase in long-distance marriage contacts. The percentage of contacts over 20km for residents in Haddington parish rose from 4% in 1740-59 to 11%. For Inveresk over the same period the increase was from 2% to 7%, and for Prestonpans between the early seventeenth and late eighteenth centuries from 3% to 13%. It is interesting to note that despite the different social and economic structures of the three urban parishes the average marriage distances at the end of the eighteenth century are very similar, and are substantially greater than for any of the rural parishes indicating, as one would expect, that the area over which townspeople maintained day-to-day contacts was substantially greater than for rural-dwellers.

The rural parishes show a similar overall pattern. Average marriage distances tend to increase slowly throughout the eighteenth century, and more markedly in its later decades. The percentage of contacts over 20km increased markedly for all parishes except Ormiston and Pencaitland. For Aberlady, Athelstaneford, Bolton, Gladsmuir and Saltoun there is also a small but significant rise in the median distance, although there were no discernible
MARRIAGE AND MOBILITY

TABLE 2. AVERAGE AND MEDIAN MARRIAGE DISTANCES

<table>
<thead>
<tr>
<th>Urban parishes</th>
<th>HADDINGTON</th>
<th>INVERESK</th>
<th>PRESTONPANS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average</td>
<td>Median</td>
<td>Average</td>
</tr>
<tr>
<td></td>
<td>1669-75</td>
<td>12.0km</td>
<td>1700-19</td>
</tr>
<tr>
<td></td>
<td>1700-19</td>
<td>11.5</td>
<td>1720-39</td>
</tr>
<tr>
<td></td>
<td>1720-39</td>
<td>11.2</td>
<td>1740-59</td>
</tr>
<tr>
<td></td>
<td>1740-59</td>
<td>13.1</td>
<td>1760-79</td>
</tr>
<tr>
<td></td>
<td>1760-79</td>
<td>15.3</td>
<td>1780-99</td>
</tr>
<tr>
<td></td>
<td>1780-99</td>
<td>21.0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rural Parishes</th>
<th>ABERLADY</th>
<th>ATHELSTANEFORD</th>
<th>BOLTON</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average</td>
<td>Median</td>
<td>Average</td>
</tr>
<tr>
<td></td>
<td>1634-46</td>
<td>9.2</td>
<td>1660-79</td>
</tr>
<tr>
<td></td>
<td>1682-99</td>
<td>9.6</td>
<td>1680-99</td>
</tr>
<tr>
<td></td>
<td>1700-19</td>
<td>12.2</td>
<td>1700-19</td>
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<td></td>
<td>1720-39</td>
<td>10.9</td>
<td>1720-39</td>
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<td></td>
<td>1740-59</td>
<td>11.6</td>
<td>1740-59</td>
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<td></td>
<td>1760-99</td>
<td>14.2</td>
<td>1760-99</td>
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</table>

<table>
<thead>
<tr>
<th>DIRLETON</th>
<th>GLADSMUIR</th>
<th>ORMISTON</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>Median</td>
<td>Average</td>
</tr>
<tr>
<td>1664-79</td>
<td>8.4</td>
<td>1693-1719</td>
</tr>
<tr>
<td>1680-99</td>
<td>8.1</td>
<td>1720-32</td>
</tr>
<tr>
<td>1703-39</td>
<td>9.9</td>
<td>1766-79</td>
</tr>
<tr>
<td>1760-79</td>
<td>10.5</td>
<td>1780-99</td>
</tr>
<tr>
<td>1780-99</td>
<td>12.0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PENCAITLAND</th>
<th>SALTOUN</th>
<th>YESTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>Median</td>
<td>Average</td>
</tr>
<tr>
<td>1698-1719</td>
<td>9.1</td>
<td>1640-79</td>
</tr>
<tr>
<td>1720-39</td>
<td>9.4</td>
<td>1680-99</td>
</tr>
<tr>
<td>1740-63</td>
<td>8.8</td>
<td>1700-19</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1720-39</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1740-59</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1760-99</td>
</tr>
</tbody>
</table>

Changes in the remaining four parishes. Increases in mobility were generally less marked than in the urban parishes. A closer examination of the data shows that average marriage distances in all the rural parishes were being pulled upwards at
MARRIAGE AND MOBILITY

the end of the eighteenth century by a limited number of contacts over increasingly long distances. Where information is available on the occupations or status of the people concerned, it is clear that most of the long-distance contacts were generated by local professional people such as ministers and schoolmasters, and sometimes wealthier farmers or, where a bride was moving out of an East Lothian parish, by professional people and merchants and tradesmen living in larger towns outside the area. Growing contact with Edinburgh and the Merse were important elements here but there were also a limited number of marriages involving partners from beyond south-east Scotland in places like Glasgow and Paisley, as well as one or two from England. Although the rise in median distances is not as uniform or as marked as with the urban parishes there are, nevertheless, some signs of an increase in the distance over which marriage contacts were made at a local level, confirming the evidence of decreasing endogamy discussed above.

So far it is clear that marriage contacts tended to fall off sharply with increasing distance but it has implicitly assumed that at a local scale levels of contact leading to marriage tended to be uniform in all directions. Some previous studies have suggested that at a local level there were no directional biases in patterns of marriage contacts while others have claimed to have identified variations linked to topography, economic patterns and local prejudices. The parishes considered here had varying economic and social structures. Of the urban parishes, Haddington was an ancient royal burgh whose main function was as a market and service centre for the surrounding countryside. Inveresk contained the old baronial burgh of Musselburgh which had a stronger manufacturing base while Prestonpans was a coal and salt-producing centre dependent mainly upon industry. The rural parishes likewise differed in the relative importance of arable and pastoral farming and in the presence or absence of industries such as coal mining. Parishes also varied in terms of their accessibility. Coastal parishes with harbours and those located along major routeways such as the main post road through East Lothian which ran from Edinburgh to Berwick upon Tweed via Musselburgh and Haddington might be expected to have had wider patterns of day-to-day contact, stretching out along the lines of communication, than more isolated rural parishes such as Yester, close to the edge of the Lammermuirs.

In order to examine this it is necessary to make allowances for variations in the populations of different parishes. All other things being equal, marriage contacts will tend to be higher with parishes whose populations are largest. To remove the effects of population differences a standardised measure of marriage contacts must be calculated. This was done using three sets of data relating to
MARRIAGE AND MOBILITY

population: the hearth tax lists of the 1690s, Webster's census of 1755, and the first official census of 1801. For each parish a 20-year block as close to the date of the population information as possible was selected and the number of marriage contacts per 1000 hearths (for the 1690s) and per 1000 inhabitants for 1755 and 1801 was calculated.

There were marked contrasts in the patterns of contact of the three urban parishes. Haddington, as one would expect of such an important market centre, had strong contacts with the purely agricultural parishes to the north, south and east, but low levels of contact with industrial parishes to the east like Inveresk, Prestonpans and Tranent. The importance of Haddington's communications links is stressed by contacts with parishes like Dunbar, Oldhamstocks and Innerwick along the post road to England, and also via the roads across the Lammermuirs to Lauderdale. Prestonpans, by contrast, had strong coastwise links with parishes like Dirleton and North Berwick, as well as locally with other industrial parishes like Tranent, but low levels of contact with inland, purely agricultural parishes. Inveresk had similarly weak contacts with the agricultural parishes on the borders of Midlothian and East Lothian, and strong links with urban parishes like Dalkeith and Prestonpans. Inveresk had many marriage contacts with Haddington during the early eighteenth century but the level of contact dropped throughout the century, possibly as the economies of the two burghs became more distinctly separated, Musselburgh developing more as an industrial centre and Haddington a rural service centre.

The more northern rural parishes, Aberlady, Athelstaneford and Dirleton, were characterised by marriage contacts reaching over most of the county as far away as Humbie, Innerwick and Ormiston. These parishes, on the best lowland soils, were among the most agriculturally advanced in the later eighteenth century and it is likely that the predominance of highly-commercialised farming systems in these areas had helped to generate wider patterns of contacts than for some of the less improved parishes to the south. By contrast, Bolton, south west of Haddington, had a more restricted pattern of contacts with most marriage partners being drawn from the parishes fringing the edge of the Lammermuirs; Garvald, Humbie and Yester, and few from the coastal plain. Gladsmuir, on the main post road, was the only one of the rural parishes west of Haddington to have significant contacts with parishes like Dunbar and Innerwick in the east of the county. Although Ormiston had an important coal-mining element the parish's basically rural character is shown by its low proportion of marriage contacts with Inveresk, Prestonpans and Tranent compared with the more agriculturally-oriented parishes of Pencaitland and Saltoun. Pencaitland and Saltoun had limited contacts with Tranent and
MARRIAGE AND MOBILITY

Prestonpans to the north and with Haddington to the east. Linkages were strongest with neighbouring agricultural parishes but there was also a surprising amount of contact with rural parishes east and north of Haddington such as Athelstaneford, Dirleton and Prestonkirk, Stenton and Spott. Yester had few contacts northwards with Haddington but strong links with other parishes along the Lammermuir edge like Bolton, Garvald and Humbie. Yester was the only rural parish to have significant marriage contacts across the Lammermuirs with Channelkirk and Lauder. In the earlier part of the period studied Yester and Bolton were perhaps the most isolated of the parishes studied but, particularly in the case of Yester, this isolation had been substantially broken down by the end of the eighteenth century.

Although covering only twelve of East Lothian's parishes this brief study has shown that there was a significant increase in day-to-day mobility, as reflected in patterns of marriage contacts, among the population of the county between the seventeenth and late eighteenth centuries. Growing mobility is indicated by a general increase in the proportion of people marrying partners from outside their own parish, and by a tendency for people to marry partners from parishes further afield, as shown by an increase in the average marriage distances for almost all parishes, and a rise in the median marriage distance for most parishes. Much of the increase in long-distance mobility was due to the substantial widening of marriage horizons for a limited elite in rural society but there was also a tendency for ordinary people to increase the distances over which courtship and marriage were maintained. This was most notable for the three urban parishes whose registers were analysed but was also evident for a number of rural parishes. Marriage contacts between parishes were not spread uniformly in relation to population distribution though. There were marked directional contrasts in patterns of marriage contacts which may have reflected the economies of individual parishes, and the state of agricultural improvement, as well as their topography and location in relation to main communications lines. Further research using parish records may provide other evidence of alterations in levels of mobility; for instance the linkage of marriages with baptisms may indicate changes through time in the proportion of couples marrying in a parish who stayed to have their children baptised there, allowing comparison with other communities in Scotland and further afield.

REFERENCES
MARRIAGE AND MOBILITY

8. Ibid.
14. Ibid.
16. Ibid.
INTRODUCTION

The study of urban history in Europe has focused on the larger towns, the provincial and national capitals which were administrative centres and foci for long-distance trade. Little attention has been directed to towns at the bottom of the urban hierarchy. Yet such centres represented most people's normal experience of urban life and most of their regular contact with the urban system would have been through such small centres. (1)

The formal establishment of large numbers of new towns primarily as trading centres is usually considered as a feature of medieval Europe rather than of later times. In most countries, while some new towns were created during the early-modern period they were comparatively few in number and often specialised in function such as fortress, dockyard or spa towns. (2) Scotland presents an interesting case study as a country where a substantial number of new urban centres was created between the sixteenth and eighteenth centuries in contrast with England where few new towns were added to the essentially medieval urban hierarchy until the rise of manufacturing centres in the second half of the eighteenth century. (3)
Little is known about the significance of these new Scottish foundations; it is not clear how many failed and how many succeeded although, as will be seen, neither success nor failure are unambiguous concepts.(4) Equally little is known about the motives which led landowners to establish such centres and the degree to which they provided capital for the provision of facilities and infrastructure. Our knowledge concerning the lower levels of the Scottish urban hierarchy during the early-modern period is limited as regards their origins, sizes, occupational structures and their role within the developing Scottish economy. What were the links between the creation of the new centres and demographic and economic growth? Are there discernible patterns of success or failure among the new towns in terms of their location, economic structure and degree of landlord involvement? How many of the new foundations remained essentially rural in size and function and how many developed as fully incorporated towns with a degree of self-government? What motives prompted landowners to establish such centres and what functions did they expect them to carry out? How much capital did they sink into their development and how much planning was involved in their creation? Were there changes of function in the economy of the more successful of these new towns such as a move from a trading role in the seventeenth century towards manufacturing in the eighteenth? This paper attempts to shed light on these questions and to set the development of these smaller Scottish urban centres in a broader context.
SOME PRELIMINARY DEFINITIONS

Some preliminary definitions are necessary for those unfamiliar with Scottish urban development. (5) In medieval and early-modern times virtually all Scottish towns were established by charter and were known as 'burghs'. Royal burghs were founded directly by the Crown. They were introduced to Scotland in the twelfth century as a copy of the chartered borough which the Normans had developed in England. Most medieval Scottish towns were royal burghs although some, such as Glasgow, were established by the church and one or two by lay landowners. Before the fifteenth century the distinctions between these categories were vague; most of the ecclesiastical centres were regarded then and later as being equal in status to the royal burghs. The layout, function and administration of the royal burghs were broadly comparable with towns elsewhere in Europe. During the fifteenth and sixteenth centuries, however, the royal burghs consolidated their position and developed a system of monopolies which was strong by European standards. They came to be regarded as a homogeneous group and their ability to pursue common interests gave them unity and solidarity. This in turn gave them considerable influence and allowed them to maintain their monopolies well into the seventeenth century. These privileges were granted by the crown in return for a major contribution to royal taxation. Solidarity was reinforced by the development of the Convention of Royal Burghs, an independent assembly free from
direct crown control, to which each royal burgh sent representatives. The Convention apportioned the burgh's contribution among its members, regulated their affairs, united and promoted their interests and defended their rights.

Each royal burgh had the sole right to overseas trade within a specified hinterland or 'liberty' which might embrace an entire sheriffdom. In the sixteenth and seventeenth centuries the creation of new royal burghs was resisted by existing ones because the liberties of the new centres had to be carved out of those of the old. The pace of royal burgh creation thus slowed down. From the fifteenth century another category of burgh began to appear, burghs of barony and regality whose trading rights were limited compared with the royal burghs. Such burghs were authorised by the crown but were held from the proprietor on whose lands they stood. Baronial burghs were not allowed to engage in foreign trade and their merchants could only buy and sell within the confines of their burgh, not in the surrounding country which fell within the jurisdiction of the royal burghs. The development of baronial burghs was opposed by neighbouring royal burghs and more generally by the Convention.

After the Restoration in 1660 the tide of opinion began to turn against the royal burghs whose monopolies were increasingly seen as restrictive. An act of 1672 gave baronial burghs most of the rights to overseas trade possessed by royal burghs. The latter won back some concessions in 1691 but the old system of
monopolies had been effectively dismantled. Baronial burghs were free to compete on equal terms with royal burghs. The records of the Convention during the late seventeenth and early eighteenth centuries are filled with attempts to try and transfer a portion of the royal burghs' tax beginning to rival and even surpass their own.

Table 1

<table>
<thead>
<tr>
<th>Period</th>
<th>New Foundations</th>
<th>New Charters Granted to Ancient Burghs</th>
<th>New Charters Granted to Baronial Burghs Promoted to Royal Burghs Licensed After 1500</th>
</tr>
</thead>
<tbody>
<tr>
<td>1500-24</td>
<td>24</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>1525-49</td>
<td>19</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>1550-74</td>
<td>5</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>1575-99</td>
<td>24</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>1600-24</td>
<td>46</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>1625-49</td>
<td>31</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>1650-74</td>
<td>52</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>1675-99</td>
<td>43</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>1700-07</td>
<td>18</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>1708-1800</td>
<td>8</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>270</td>
<td>21</td>
<td>25</td>
</tr>
</tbody>
</table>
THE PATTERN OF FOUNDATION OF BARONIAL BURGHS 1500-1800

Table 1 shows the pattern of foundation of baronial burghs between 1500 and 1800. The process was remarkably steady over most of the period, reaching a peak in the decades after the Restoration and falling off abruptly following the Union of 1707. Burghs of barony which were later promoted to royal burghs are also shown. It is not always easy to distinguish new foundations from attempts to re-establish ancient burghs whose activities had declined or whose rights were not clearly defined, but this has been done as far as current knowledge permits. A further problem is that some surviving charters are confirmations of existing privileges to established burghs and it is only possible to differentiate between these original founding charters where other references indicate that a burgh was flourishing before the date of its first recorded charter. Nevertheless, the overall scale and pattern of burgh foundation is clear.

The establishment of so many new centres, even allowing for a high level of failure, must indicate an expansion of trading activity within the Scottish economy, especially among the agricultural population for, as will be shown below, most of these new foundations were developed essentially as rural service centres. This is particularly the case in the decades between the Restoration in 1660 and the Union of 1707 when over 40% of
the new centres were authorised and a large number of non-burghal market centres was also established. (6) The processes behind this trend are far from clear and would merit further research. (7)

Some 270 new baronial burghs were authorised in Scotland between 1500 and 1800: how many developed into towns and how many failed entirely? In answering this question four attributes are particularly useful: the development of a corporate administrative structure, the existence of flourishing markets and fairs, the possession of an occupational structure sufficiently diversified to distinguish a baronial burgh from its rural surroundings, and certain minimum population size. Population is the best criterion with which to start.

THE POPULATION OF SMALL TOWNS IN EARLY-MODERN SCOTLAND; THE PROBLEM OF SOURCES.

Before the late seventeenth century there are no standardised data for establishing the sizes of Scottish towns. For the early 1690s the hearth tax returns cover much of Scotland and from later in the decade there are the more fragmentary poll tax returns. The hearth tax data were mostly compiled at a parish level though in some cases a breakdown is given of burgh and landward populations (8).
The next potential source of urban population data is a census conducted by parish clergy in 1755. This is considered to be reasonably accurate (9) but along with the first official census in 1801 it only gives parish populations without any breakdown into urban and rural elements. This does not matter greatly for the bigger towns but for smaller centres the large size of Scottish parishes makes it impossible to estimate the populations of the settlements which they contain. Only one data set covers every parish and gives urban populations for most of them. This is the Old Statistical Account, a series of parish descriptions produced by local clergymen in the early 1790's under the direction of Sir John Sinclair. The accounts were written in response to a detailed questionnaire which asked, among other things, for demographic and occupational information. Most ministers indicated the sizes of towns and villages within their parishes as well as the total parish population. The period at which the O.S.A. was compiled is close to 1780, the date which is being used as a datum at this conference and it allows a detailed reconstruction of the Scottish urban hierarchy at this time.

The full list of towns and their populations at this time is presented in Appendix 1, but the data are summarised in Table 2. A threshold of 500 inhabitants has been used as an indication of the success of baronial burghs founded after 1500. It is an arbitrary measure but it will serve as a basis for more detailed investigation. In a few cases, where specific population figures were not given, it has been possible to estimate the sizes of centres from other information such as the number of families or
the size of certain occupational groups. It is unlikely that many centres with over 1000 inhabitants have been omitted and it is probable that most centres with populations of over 500 have been included.

Table 2  THE POPULATIONS OF SCOTTISH TOWNS IN THE EARLY 1790s

<table>
<thead>
<tr>
<th>POP.</th>
<th>NO. OF ROYAL TOWNS</th>
<th>NO. OF BURGHAL ESTATE MARKETS</th>
<th>NO. OF NON-PLANNED INDUSTRIAL MARKETS</th>
<th>NO. OF BURGHAL BURGS (ANCIENT) POST 1500</th>
<th>NO. OF BARONIAL BURGS POST 1500</th>
</tr>
</thead>
<tbody>
<tr>
<td>5000+</td>
<td>16</td>
<td>11</td>
<td>69%</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5000-</td>
<td>4999-2000</td>
<td>33</td>
<td>14</td>
<td>42%</td>
<td>9</td>
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<tr>
<td>1999-</td>
<td>1999-1000</td>
<td>72</td>
<td>17</td>
<td>24%</td>
<td>13</td>
</tr>
<tr>
<td>999-500</td>
<td>999-500</td>
<td>72</td>
<td>9</td>
<td>13%</td>
<td>10</td>
</tr>
</tbody>
</table>

Table 2  THE POPULATIONS OF SCOTTISH TOWNS IN THE EARLY 1790s (continued)

<table>
<thead>
<tr>
<th>POP.</th>
<th>NO. OF ROYAL TOWNS</th>
<th>NO. OF BURGHAL ESTATE MARKETS</th>
<th>NO. OF NON-PLANNED INDUSTRIAL MARKETS</th>
<th>NO. OF BURGHAL BURGS (ANCIENT) POST 1500</th>
<th>NO. OF BARONIAL BURGS POST 1500</th>
</tr>
</thead>
<tbody>
<tr>
<td>5000+</td>
<td>16</td>
<td>11</td>
<td>69%</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5000-</td>
<td>4999-2000</td>
<td>33</td>
<td>14</td>
<td>42%</td>
<td>9</td>
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<tr>
<td>1999-</td>
<td>1999-1000</td>
<td>72</td>
<td>17</td>
<td>24%</td>
<td>13</td>
</tr>
<tr>
<td>999-500</td>
<td>999-500</td>
<td>72</td>
<td>9</td>
<td>13%</td>
<td>10</td>
</tr>
</tbody>
</table>
Table 3 DENSITY OF URBAN POPULATION

<table>
<thead>
<tr>
<th>SIZE (OF CENTRE)</th>
<th>TOTAL (POP)</th>
<th>% URBAN POP OVER 1000</th>
<th>% NATIONAL POP 1690</th>
<th>1755</th>
<th>1790</th>
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<tr>
<td>10,000+</td>
<td>248,000</td>
<td>51</td>
<td>6.2</td>
<td>8.8</td>
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<tr>
<td>9999-5000</td>
<td>49,000</td>
<td>10</td>
<td>1.6</td>
<td>2.4</td>
<td>3.2</td>
</tr>
<tr>
<td>4999-2000</td>
<td>97,000</td>
<td>20</td>
<td>3.4</td>
<td>?</td>
<td>6.4</td>
</tr>
<tr>
<td>1999-1000</td>
<td>96,000</td>
<td>19</td>
<td>3.5</td>
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<td>6.3</td>
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<tr>
<td>999-500</td>
<td>51,000</td>
<td>9</td>
<td>?</td>
<td>?</td>
<td>3.4</td>
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</tbody>
</table>

THE SIZES OF SCOTTISH TOWNS IN THE LATE EIGHTEENTH CENTURY: HOW SUCCESSFUL WERE THE NEW BARONIAL BURGHS?

In a country whose population was traditionally dispersed and urbanisation modest, (10) most towns were still small by the definition employed at this conference. Only 7 centres had over 10,000 inhabitants and 8 between 5000 and 9999 while 109 settlements, containing about 40% of the urban population, had between 1000 and 4999 inhabitants. In addition at least 72 centres had populations of between 500 and 999. While some of these were described by contemporaries as 'villages', others preserved a corporate structure and had a role which was more than purely local. In aggregate such centres had a population which was larger than that living in towns of between 5000 and 9999 inhabitants.
Despite this Scotland was, by the late eighteenth century, highly urbanised by contemporary standards. De Vries has estimated that by 1800 Scotland ranked fourth in Europe after the Netherlands, England and Wales, and Belgium in the percentage of her population which was urbanised. By his calculations Scotland was twice as urbanised as France, three times as urbanised as Germany, and only slightly behind England and Wales. From the mid seventeenth century the rate of growth of the percentage of Scotland's population that was urbanised was twice that of England and Wales. Most of this expansion occurred during the eighteenth century. Towns with between 2000-2500 and 5000 inhabitants formed a larger percentage of Scotland's total population than in many other countries. Although the figures were not as high as for England and Wales, catching up rapidly. But how much of this eighteenth-century urban growth, particularly of the smaller centres, is attributable to the new baronial burghs?

Table 2, provides an assessment of the success of post-1500 baronial burghs in terms of their place within the urban hierarchy. Blumin has remarked that towns emerging in the later stages of urban development seldom rise high in the hierarchy as the important central place functions have already been claimed by earlier settlements. This was certainly the case in Scotland. Post-1500 baronial burghs contained only 17% of the urban population in centres with over 1000 inhabitants. The
royal burghs and pre-sixteenth century baronial burghs dominated the upper levels of the hierarchy. Among towns with over 5,000 inhabitants only Greenock, a port, and Kilmarnock, a manufacturing town, had originated after 1500. Pre-sixteenth century foundations also made up nearly three quarters of the towns with populations between 1000 and 2000. However, baronial burghs founded after 1500 accounted for nearly a third of centres with between 1000 and 4999 inhabitants and over half of those between 500 and 999. The post-1500 foundations had clearly established themselves mainly at the lower levels of the urban hierarchy.

When one examines the rates of growth during the eighteenth century by comparing population sizes calculated from the hearth and poll tax with those from the O.S.A., a different picture emerges. Greenock, whose population grew 15 times, was exceptional but of towns with populations between 1000 and 4999 in the late eighteenth century some post-1500 baronial burghs such as Peterhead had grown x6. On the other hand many of the older royal burghs, particularly shire centres in areas remote from industrial development, had experienced much more modest growth. Peebles and Lanark had barely maintained their populations while Selkirk and Linlithgow seem to have shrunk. Other royal burghs including Banff, Kirkcudbright, Nairn and St. Andrews had grown less rapidly than many baronial burghs. Although there was considerable of variablility within each
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group, the average rate of growth of post-1500 baronial burghs was x4.5 while that for the royal burghs was x1.9. Granted that most baronial burghs had developed from small beginnings and were still in an early, rapid phase of expansion, the figures suggest a certain dynamism which was lacking in many of the older royal burghs.

There is no significant correlation between the foundation dates of individual centres and their place in the urban hierarchy. This is due mainly to the occurrence of a number of ancient royal burghs low in the hierarchy. Some had remained small like Inverurie and Kintore with 360 and 228 inhabitants respectively, while others had declined. There is, however, a more general relationship between categories of centres and their place in the urban hierarchy. The early existence of a network of medieval royal and baronial burghs limited the scope for post-1500 centres to reach levels of the urban hierarchy. In the same way, early-modern baronial burghs limited opportunities for late seventeenth century non-burghal market centres which formed a mere 3% of settlements with populations between 1000 and 1999. The development of large-scale industry on the coalfields during the nineteenth century was to alter this situation by creating a number of large urban centres without pre-industrial origins. The start of this process can be seen in the appearance of factory settlements like Catrine, New Lanark and Stanley in Appendix 1.
It is clear that few post-1500 baronial burghs had become sizable towns by the 1790s, but how many sixteenth and seventeenth-century foundations were even this successful? Table 2 shows that 78 baronial burghs founded or first recorded after 1500 had attained populations of over 500 by the 1790s. This represents about a quarter of the centres which had been authorised suggesting that three out of four centres had been stillborn, failed to prosper, or only achieved modest success. Many other had between 200 and 499 inhabitants in the late eighteenth century and so cannot be considered total failures. The real success rate is likely to be even lower, however, if one considers that several post-1500 centres had only developed belatedly due to the expansion of textiles and other industries in the late eighteenth century. On the other hand, the success rate of c25% does not include baronial burghs which flourished for a while but which had declined into obscurity by the late eighteenth century. It is not possible at this stage to show how many baronial burghs retained active markets and fairs but the existence of corporate structures has been established by Pryde.(14) Table 4 shows the numbers of pre- and post-1500 baronial burghs in various size categories which have developed a corporate organisation. Clearly most of the centres with populations of over 1000 had developed a separate administrative structure, but less than half of those between 500 and 999 had done so. Success and corporate organisation were closely related.
Table 4 CORPORATE STATUS OF BARONIAL BURGHS

<table>
<thead>
<tr>
<th>POPULATION</th>
<th>BARONIAL BURGHS FOUNDED BEFORE 1500</th>
<th>BARONIAL BURGHS FOUNDED AFTER 1500</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CORPORATE</td>
<td>NON CORPORATE</td>
</tr>
<tr>
<td>5000+</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>1000-4999</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>500-999</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

Burghal rights could remain dormant for considerable periods and then be re-activated by enthusiastic proprietors or by the growth of local industry and trade. Caltt in Aberdeenshire received its charter in 1501 but was only a rural parish centre in the late seventeenth century. An early eighteenth century account of the parish indicates that attempts were then being made to re-establish its rights as a baronial burgh.(15) Later in the century the proprietor, Colonel Gordon of Knockespock, tried to revive Clatt's licensed markets and fairs by various expedients including advertising in Aberdeen and Edinburgh newspapers. The attempt ended when he was sent to the West Indies on government service and no further progress was made.(16)

Some burgh charters appear to have been obtained out of petty rivalry between neighbouring proprietors or as a status symbol without any intention of creating a burgh. Such explanations are likely to lie behind the granting to Wemyss of Wemyss in 1511 of charters for three baronial burghs on sites
within a mile or two of each other in the remote upland valley of Strathardle. (17) On the other hand genuine attempts at burgh foundation could also fail; for instance the efforts of Boyd of Penkell to lay out a new settlement at Girvan in Ayrshire. The streets were marked out in an area of barren sands and a pole was erected at the site of the market cross but the proprietor was unable to persuade people to move to the settlement and not a single house was built. (18) Sometimes the lots of land laid out for an intended burgh survived as relict features. At Crawford, granted to the Earl of Angus in 1510-11, the 20 lots of land which had been feued to create the burgh still functioned as smallholdings in the late eighteenth century. Their occupants maintained their own weekly court (mainly as an excuse to adjourn to the nearby alehouse) and insisted on calling the settlement a town rather than a village but there were no vestiges of urban functions. (19) At Preston in Kirkcudbrightshire only the market cross on its stone base remained to mark the trading rights of the burgh which had been established in 1663, but the settlement consisted of only three families by the 1790s. (20) There has been little attempt to systematically examine the Scottish landscape or early maps for evidence of planning associated with burghs which never developed or lapsed into obscurity; this could prove as interesting an exercise as hunting for deserted medieval villages in England. (21)
On the other hand the failure rate of post-1500 baronial burghs is substantially reduced if the existence of functioning markets and fairs rather than size or corporate structure is considered as an adequate criterion. For example topographic descriptions show that in early eighteenth-century Aberdeenshire many baronial burghs, although only rural settlements, had functioning markets and fairs, some of which were of regional importance. At least a dozen baronial burghs were active at this scale. (22) The authorisation of a burgh of barony allowed a landowner to hold a weekly market and one or more annual fairs and to erect a market cross as a visible symbol of these rights. In many cases obtaining a burgh charter was probably designed merely to attach market rights to a pre-existing rural service centre. In such cases there may have been a hope that further development might occur but there was probably no real determination to try and create an urban settlement. In terms of infrastructure all that was required was a space for the market, the market cross, and perhaps a tolbooth where revenues could be collected and market activities regulated.

Many of the smaller market centres in early eighteenth-century Aberdeenshire, such as Ellon, Old Meldrum and Tarland, had tolbooths. Tarland also had a victual house for storing grain brought to the market. In such small centres it is unlikely that these buildings would have been erected if there had not been the trade to justify it. However, where most
exchanges were direct ones between rural producers and consumers who merely used the market centre as a meeting place, there might be insufficient spin-off from trade to generate local crafts and encourage the activities of middlemen. The markets and fairs of many such centres functioned at a purely local level into the eighteenth century, the settlements remaining small hamlet clusters with populations of 100 or less.

When a baronial burgh was authorised it was established within a pre-existing rural jurisdictional unit, a barony or regality, whose functions, including a court, mill and smithy provided the initial framework within which a burgh might develop. (24) The caput, or administrative focus of the barony, was usually also the centre of an ecclesiastical parish, from such a settlement a town might develop but a great many never grew any larger. In a pre-industrial economy such as that of early-modern Scotland it is a mistake to link the operation of markets and fairs too closely with urban development. As Unwin has shown for medieval England, (25) and for underdeveloped countries at the present day, most market centres were rural, not urban. Some baronial burghs clearly never developed any trading functions at all, but the fact that so many were parish centres suggests that most of them would have functioned as viable local market centres. There are close parallels with the establishment of networks of rural markets and fairs in Ireland
from the early seventeenth century. (26) In later seventeenth-century Scotland many markets and fairs were authorised in existing rural settlements without the granting of burghal rights. (27) There was probably no effective difference between the more successful of these and market centres with burghal status in the early eighteenth century non-burghal centres in Aberdeenshire like Culsalmond, Keith and Rayne had some of the most widely-attended fairs. (28) The advantage of obtaining a burgh charter would have been its greater scope for allowing large-scale development if enough local trade was generated by the centre to allow it to expand and to acquire a regional as opposed to a local trading role. In order to understand how this occurred we need to examine the processes by which some proprietors set out to develop their burghs into real towns.

LANDLORD INVOLVEMENT

Given that burghal rights were usually attached to existing settlements there was no automatic need for landowners to sink a lot of capital into burgh development. The fact that many proprietors received charters to develop two, three or even more burghs simultaneously on different parts of their estates indicates that they did not expect to incur heavy costs. (29) By the early sixteenth century, however, landowners who obtained charters for baronial burghs also had the right to have burgesses and to create institutions with a degree of self
government. Proprietors also had the power to grant out plots of land within the burgh in feu - a perpetual tenure - to the inhabitants. The need to apportion land to burgesses or as feus entailed a land division requiring some organisation and might result in the creation of a planned settlement on a new site, though possibly adjacent to the existing barony centre. Creation of a planned burgh with burgesses and a regular layout would in itself involve more expense than for a rural market centre. However, as with many later planned estate villages, it is probable that proprietors were often able to pass on much of the costs of development to the inhabitants.(30) Where a coastal settlement was involved provision of a harbour might be an important prerequisite for success and might be the most expensive item provided by a proprietor. At Fraserburgh, for instance, developed by Sir Alexander Fraser of Philorh, the greatest expense was the provision of a stone breakwater which was initially sited in an unsuitable location and had to be rebuilt.(31) The provision of harbour facilities was particularly important where the main function of the baronial burgh was to allow the export of the resources of an estate. This was particularly evident with the coal and salt-producing baronial burghs of the Firth of Forth where provision of a quay or harbour was a vital encouragement for industrial development.(32) On the other hand, commodities like grain could be shipped out from an estate, with a minimum of landlord investment, as was the case with the Earls of Panmure and their
burgh of East Haven. (33) While the encouragement of proprietors was particularly important for the success of an industrial settlement, the activities of the Earl of Man in developing Alloa in the early eighteenth century were probably unusual in their variety and scale. (34) Landlord involvement was not confined only to baronial burghs though; there are a number of instances of smaller royal burghs which were dominated by local landowners, who sometimes played an important role in financing their development. Inverary, which was completely resited and rebuilt by the Dukes of Argyll, is one of the best examples of this type.

THE FUNCTION AND OCCUPATIONAL STRUCTURE OF BARONIAL BURGHS

What were the functional characteristics of those baronial burghs which developed sufficiently to be considered as towns? A combination of a reasonable distance from competing royal burghs, a degree of landlord involvement in the development of the settlement, the existence of functions which provided a basis for early development and the ability to generate trade at more than a local scale seem to have been involved. As illustrations we can consider two examples. At Langholm in Dumfriesshire the core of the burgh was 10 plots of land feued by the Earl of Nithsdale. The feuars were required to build two-storey houses of stone and lime facing each other across a street at least 30 feet wide. In the early eighteenth century
the original core of the burgh was still discernible but the
settlement had grown into a village with a range of craftsmen.
It acted as the seat of the regality court of Eskdale, a
function which doubtless helped to bring business into Langholm
from a wide area. Its markets and fairs were handling a
flourishing trade in local produce.(35) By the 1790s the
settlement had grown into a town with around 1500
inhabitants.(36) At the opposite end of the country Thurso had
received its charter in 1633. A century or so later the burgh
had a population of around 1200. The income of its tolls and
market charges brought its patrons, the Sinclairs of Ulbster, a
revenue of 500 merks a year.(37) The growth of the town’s
activities had led to its capturing many of the functions
formerly discharged by the royal burgh of Wick, the official
sheriffdom centre.
A measure of the importance of the town’s mercantile
activities was the location of a custom house here and there was
thriving export trade in grain, livestock products and fish.(38)

Most of the more successful baronial burghs developed
initially on the basis of capturing enough local trade. In
coastal settlements, such as Peterhead and Fraserburgh, sighing
might be an important adjunct to a general trading role. The
coal and salt-producing centres of the Forth and Ayrshire coast
were another distinct group. The occupational structures of
some baronial burghs in the late seventeenth century can be
analysed from the poll tax returns.(39) Some burghs, such as
Bathgate and Old Meldrum with populations of around 250 were distinctly larger than surrounding rural settlements but only had the more basic craft activities, with few merchants and professional people so that they cannot be considered as urban. Burghs with populations of about 500 and upwards had sufficiently diversified occupational structures to be considered as towns. Such centres not only had a range of basic crafts but also distinct merchant communities and a few people in professional services such as medicine and the law. Peterhead and Fraserburgh, relatively isolated from Aberdeen the nearest large royal burgh, with well-populated rural hinterlands, are good examples of this type of town. There was probably little difference between the occupational structures of such towns and those of similar-sized royal burghs. Agriculture still remained important in these smaller burghs. The percentage of the male population engaged full time in agriculture varied from one burgh to another but could be as high as 40% and in addition many more inhabitants are likely to have engaged in agriculture part-time.

In the seventeenth century many smaller baronial and royal burghs had acted as rural service centres with no marked occupational specialisation. During the eighteenth century a trend towards growing specialisation of function among these smaller towns is evident, similar to changes in English provincial centres. The O.S.A. provides enough breakdowns
of occupations for smaller towns to make this clear. The earliest of the smaller baronial burghs to emerge as a distinctive functional group were the coal mining and salt making towns of the Firth of Forth; notably Bo’ness and Prestonpans which developed rapidly in the later seventeenth century(41). By the late eighteenth century another group of small burghs had specialised in textile manufacture, particularly linen. In Kinross, for example, weavers made up over 60% of the adult male workforce.(42) Although there was less scope than in England, some baronial burghs had become social centres for local landowners. Maybole, the only corporate town in the Carrick district of Ayrshire, had developed in this way by the early eighteenth century. Many of the local gentry owned houses there and occupied them during the winter.(43) Moffat, founded in 1648, was a staging point on the roads south from Glasgow and Edinburgh but the discovery of mineral springs led to its development as a spa centre, its many inns catering for visitors as well as passing travellers.(44) Other baronial burghs developed as ports. Greenock, and Port Glasgow are among the most prominent examples. Portpatrick developed due to its passenger and freight services to Ireland - although it handled a good deal of trade its inhabitants were carriers rather than merchants.(45)

Another change during the eighteenth century was a gradual decline in the trading functions of many rural market centres as well as the decay of many small burghs with populations of under 500. The reasons for this are complex but the general
improvement of overland communications, and rising standards of living for the population as a whole, and an increasing emphasis on clothing and goods imported from outside the district rather than locally made, are likely to have caused a concentration of trade in the smaller towns as opposed to the purely rural service centres. (46) Other influences included the unsuitability of many small harbours for the growing size of vessels in the coasting trade. Again this trend has parallels with Ireland (47) and tended to strengthen the lower levels of the urban hierarchy at the expense of those very small burghs which were not quite rural yet not fully urban.

CONCLUSION

Within such a limited space it has not been possible to explore in detail the functional and occupational characteristics of the new urban centres which emerged in Scotland between 1500 and 1800. This paper has, however, tried to show how such centres fitted into the urban hierarchy which can be reconstructed for later eighteenth century Scotland and to assess their overall impact as a group. The failure rate of the new foundations was high in that many never developed into real towns but it has been shown that large numbers of them fulfilled the function for which they had been designed, namely to provide basic marketing facilities at a local level. There were also some spectacular success stories but, predictably, most of the
centres which did develop into towns remained small and did not seriously challenge the pre-eminence of the long-established larger royal burghs. Nevertheless, they did make an important contribution in filling out the lower levels of the urban hierarchy. Most of them had originally been established purely as rural service centres though industrial development was significant in some cases. As the eighteenth century progressed, the baronial burghs adapted to changing economic conditions and took on a greater variety of functions. There are indications that, as the Scottish economy developed and communications improved, there was a decline of purely rural market centres and a consolidation of activity among those centres which had developed recognisable urban characteristics. In this there are parallels with England and with other European countries but further research will be required to highlight the distinctively Scottish features of urban development from the seventeenth century onwards into the Industrial Revolution.
NOTES


3. The details of these foundations are given in G.S. Pryde. The burghs of Scotland; a critical list. (Glasgow) 1965.


8. The problems of using these sources are considered in detail in M. Flinn (ed.) Scottish population history. (Cambridge) 1977 51-7.

9. Ibid. 58-64.


12. Ibid. 62-77.


14. G.S. Pryde (1963) op.cit. lxxxv.


17. G.S. Pryde (1963) op.cit. liv.

18. W. Macfarlane (1907) op.cit. II 13.

19. O.S.A. IV 509.

20. O.S.A. XV 121.

21. I.H. Adams (1978) op.cit. 69-70. Maps two sites where an earlier baronial burgh was moved to a new location as a planned estate village.

22. W. Macfarlane (1906) op.cit. I passim.

23. Ibid. 25.

24. G.S. Pryde (1963) op.cit. xlviii.


27. I.D. Whyte (1979) op.cit.

28. W. Macfarlane (1906) op.cit. I 5, 16, 89.

29. G.S. Pryde (1965) op.cit.


31. W. Macfarlane (1907) op.cit. 278.

32. T.C. Smout (1963) op.cit. 138.

33. I.D. Whyte (1979) op.cit. 225.


35. Ibid. (1906) 389.

36. O.S.A. VIII 541.

37. W. Macfarlane (1906) op.cit. 170.
38. Ibid.


41. T.C. Smout (1963) op.cit. 136-139.

42. O.S.A. VI 168.

43. W. Macfarlane (1907) op.cit. 16.

44. O.S.A. II 285.

45. Ibid. I 41.


47. P. O'Flanagan (1985) op.cit. 372.
## APPENDIX 1. THE SCOTTISH URBAN HEIRARCHY, c1790-1795

<table>
<thead>
<tr>
<th>TOWN</th>
<th>POPULATION (O.S.A.)</th>
<th>STATUS</th>
<th>DATE OF FOUNDATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. EDINBURGH (&amp; LEITH)</td>
<td>84,886</td>
<td>R</td>
<td>1124-27</td>
</tr>
<tr>
<td>2. GLASGOW</td>
<td>64,743</td>
<td>R</td>
<td>C12</td>
</tr>
<tr>
<td>3. DUNDEE</td>
<td>24,000</td>
<td>R</td>
<td>1191-95</td>
</tr>
<tr>
<td>4. ABERDEEN</td>
<td>20,067</td>
<td>R</td>
<td>1124-53</td>
</tr>
<tr>
<td>5. PAISLEY</td>
<td>19,903</td>
<td>B(A)</td>
<td>1488</td>
</tr>
<tr>
<td>6. PERTH (&amp; BRIDGEN)</td>
<td>19,500</td>
<td>R</td>
<td>1124-27</td>
</tr>
<tr>
<td>7. GREENOCK</td>
<td>15,000</td>
<td>B</td>
<td>1635</td>
</tr>
<tr>
<td>8. DUMFRIES</td>
<td>6,902</td>
<td>R</td>
<td>1186</td>
</tr>
<tr>
<td>9. KILMARNOCK</td>
<td>5,670</td>
<td>B</td>
<td>1591-2</td>
</tr>
<tr>
<td>10. AYR</td>
<td>5,560</td>
<td>R</td>
<td>1203-6</td>
</tr>
<tr>
<td>11. MONTROSE</td>
<td>5,194</td>
<td>R</td>
<td>1124-53</td>
</tr>
<tr>
<td>12. DUNFERMLINE</td>
<td>5,192</td>
<td>R</td>
<td>1124-27</td>
</tr>
<tr>
<td>13. ARBROATH</td>
<td>5,183</td>
<td>B(A)-R</td>
<td>C12/1599</td>
</tr>
<tr>
<td>14. INVERNESS</td>
<td>5,107</td>
<td>R</td>
<td>1153-65</td>
</tr>
<tr>
<td>15. STIRLING</td>
<td>c5,000</td>
<td>R</td>
<td>1124-27</td>
</tr>
<tr>
<td>16. CAMPBELLTOWN</td>
<td>5,000</td>
<td>B-R</td>
<td>1667/1700</td>
</tr>
<tr>
<td>17. BRECHIN</td>
<td>4,300</td>
<td>R</td>
<td>1165-71</td>
</tr>
<tr>
<td>18. KIRKCALDY</td>
<td>4,267</td>
<td>B(A)-R</td>
<td>1315-28/1644</td>
</tr>
<tr>
<td>19. DalKEITH</td>
<td>4,200</td>
<td>B(A)</td>
<td>1401</td>
</tr>
<tr>
<td>20. PORT GLASGOW</td>
<td>4,036</td>
<td>B</td>
<td>1668</td>
</tr>
<tr>
<td>21. MUSSELBURGH</td>
<td>4,015</td>
<td>B(A)</td>
<td>1315-28</td>
</tr>
<tr>
<td>22. FALKIRK</td>
<td>3,892</td>
<td>B</td>
<td>1600</td>
</tr>
<tr>
<td>23. FORFAR</td>
<td>3,800</td>
<td>R</td>
<td>1184</td>
</tr>
<tr>
<td>24. HAMILTON</td>
<td>3,601</td>
<td>B(A)-R</td>
<td>c15/1549</td>
</tr>
<tr>
<td>25. KELSO</td>
<td>3,557</td>
<td>B(A)</td>
<td>1237</td>
</tr>
<tr>
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<td></td>
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<td>-----</td>
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</tr>
<tr>
<td>26.</td>
<td>IRVINE</td>
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<tr>
<td>27.</td>
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<td>c3,500</td>
<td>SUB</td>
</tr>
<tr>
<td>28.</td>
<td>CUPAR</td>
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</tr>
<tr>
<td>29.</td>
<td>ALLOA</td>
<td>3,132</td>
<td>B(A)</td>
</tr>
<tr>
<td>30.</td>
<td>STEWARTON</td>
<td>c3,000</td>
<td>MV</td>
</tr>
<tr>
<td>31.</td>
<td>ELGIN</td>
<td>2,920</td>
<td>R</td>
</tr>
<tr>
<td>32.</td>
<td>BANFF</td>
<td>2,860</td>
<td>R</td>
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<tr>
<td>33.</td>
<td>BO'NESS</td>
<td>2,613</td>
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<td>ROTHESAY</td>
<td>2,607</td>
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<td>HADDINGTON</td>
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<td>36.</td>
<td>PETERHEAD</td>
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<tr>
<td>37.</td>
<td>ST. ANDREWS</td>
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<td>FORRES</td>
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<tr>
<td>39.</td>
<td>SALTCOATS</td>
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<td>B</td>
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<tr>
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<td>DUNS</td>
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</tr>
<tr>
<td>41.</td>
<td>HAWICK</td>
<td>2,320</td>
<td>B</td>
</tr>
<tr>
<td>42.</td>
<td>LINLITHGOW</td>
<td>2,282</td>
<td>R</td>
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<tr>
<td>43.</td>
<td>LANARK</td>
<td>2,260</td>
<td>R</td>
</tr>
<tr>
<td>44.</td>
<td>PATHHEAD</td>
<td>2,089</td>
<td>M</td>
</tr>
<tr>
<td>45.</td>
<td>CRIEFF</td>
<td>2,071</td>
<td>B</td>
</tr>
<tr>
<td>46.</td>
<td>DUNBAR</td>
<td>c2,000</td>
<td>R</td>
</tr>
<tr>
<td>47.</td>
<td>JEDBURGH</td>
<td>c2,000</td>
<td>R</td>
</tr>
<tr>
<td>48.</td>
<td>KIRKWALL</td>
<td>c2,000</td>
<td>R</td>
</tr>
<tr>
<td>49.</td>
<td>HUNTLY</td>
<td>c2,000</td>
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<tr>
<td>50.</td>
<td>DUNBARTON</td>
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<td>51.</td>
<td>AIRDRIE</td>
<td>1,762</td>
<td>M</td>
</tr>
<tr>
<td>52.</td>
<td>BEITH</td>
<td>1,754</td>
<td>MV?</td>
</tr>
<tr>
<td>53.</td>
<td>DYSART</td>
<td>1,736</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>Name</td>
<td>Population</td>
<td>Region</td>
</tr>
<tr>
<td>---</td>
<td>------------------</td>
<td>------------</td>
<td>--------</td>
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<tr>
<td>54.</td>
<td>KIRKCUDBRIGHT</td>
<td>1,641</td>
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<tr>
<td>55.</td>
<td>RUTHERGLEN</td>
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**KEY TO STATUS SYMBOLS**

- **R** ROYAL BURGH
- **B(A)** BARONIAL BURGH, PRE-1500
- **B** BARONIAL BURGH, POST-1500
- **M** NON-BURGHAL MARKET CENTRE, POST-1660
- **PV** PLANNED ESTATE VILLAGE
- **MV** MANUFACTURING VILLAGE
- **SUB** SUBURB
6
DEBT AND CREDIT, POVERTY AND PROSPERITY IN A SEVENTEENTH-CENTURY SCOTTISH RURAL COMMUNITY

I. D. Whyte and K. A. Whyte

The tenantry in Scotland before the era of ‘improvement’ have been viewed as making little contribution to agricultural development. The emphasis has been on landowners as instigators of economic change. Recently there has been some re-assessment of the contribution of tenant farmers to agricultural innovation during the eighteenth century but little attention has been given to their position during the seventeenth century.

The continuation of major subsistence crises until the end of the seventeenth century has been taken as a sign of the inefficiency of agriculture and of the poverty and vulnerability of rural society. Yet Devine has pointed out that the bad years of the later 1690s were an uncharacteristic episode in a century from the 1650s during which agriculture was capable of feeding Scotland’s population in most years and providing periodic surpluses for export. This contrasts with the late sixteenth and early seventeenth centuries when subsistence crises recurred with devastating frequency. Does this indicate that agriculture was more prosperous after the mid-seventeenth century? If so, what form did this prosperity take, who benefited, and what effects did it have on rural society? A recent study has indicated that the tenantry in Lowland Scotland were more stratified in socio-economic terms than has been accepted in the past. This implies that contrasts in wealth and in the ability to accumulate capital must have existed. Little attention has been paid to the distribution of wealth within Scottish rural society at this time, possibly because it has been assumed that little significant variation occurred. Central to a study of the distribution of wealth is a consideration of the nature, extent and role of credit. The extent to which credit was available, the forms that it took and the sources from which it came may tell us a great deal about social conditions, indicate whether capital accumulation was occurring, and highlight the economic constraints within which rural society operated. This essay examines the distribution of wealth, patterns of capital accumulation and mechanisms of debt and credit within the context of a detailed case study.

A major body of information on debt and credit exists in the form of Commissary Court testaments, although they have scarcely been exploited. The analysis which follows is based on the detailed study of 200 testaments relating to people living on the Panmure estates in Forfarshire during the seventeenth century. While the sample is too small to allow more than tentative conclusions regarding trends within Scottish society, it was chosen because information from
it could be linked to an existing data base on rents, tenure and arrears provided by the unusually detailed and standardised rentals and accounts for these estates.

The testaments in the sample relate to people ranging from the tenants of substantial farms to cottars and farm servants although, as with English probate inventories, there is under-representation of people in the lower social strata. For people engaged in agriculture the testaments list the farming stock, especially animals, growing crops and stored grain, in some detail along with their estimated value. Personal and household possessions are rarely itemised, usually being lumped together in a single valuation. Most testaments include details of the debts which were owing by, as well as to, the deceased. In this respect they are superior to probate inventories which usually list only testators’ assets and not their liabilities.

Table 1 shows the proportions of people in different social groups who lent and owed money. The testaments were divided into seven categories. It proved impossible to differentiate tenant farmers according to the size of their holdings as such information was not always forthcoming from rentals; if forthcoming, it was usually expressed only in customary assessments such as ploughgates. Nor was it possible to use the testaments to discover the amount of land which each tenant cultivated, as the size of the area under crop could be estimated only from those inventories which had been drawn up between seedtime and harvest, and which recorded the quantities of seed sown.

A more effective way of differentiating the tenantry would have been by their rents, but even this presented problems of comparability between those farmers who paid rents principally in grain, and those who paid principally in money. Instead, the tenants in the sample were grouped into three broad classes on the basis of the number of plough oxen which they possessed. Given the impossibility of calculating any better measure of holding size which could be used for every tenant, this is probably the best way to categorise them. The acreage which tenants had under crop can be estimated from summer inventories which give the amount

<table>
<thead>
<tr>
<th>Category</th>
<th>Average Cash Assets, £ Scots excluding farm stock and household goods</th>
<th>% with Assets</th>
<th>Average debts £ Scots</th>
<th>% with Debts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Tenants</td>
<td>(20)</td>
<td>785</td>
<td>62</td>
<td>824</td>
</tr>
<tr>
<td>Medium Tenants</td>
<td>(59)</td>
<td>395</td>
<td>50</td>
<td>200</td>
</tr>
<tr>
<td>Small Tenants</td>
<td>(39)</td>
<td>79</td>
<td>62</td>
<td>92</td>
</tr>
<tr>
<td>Cottars</td>
<td>(44)</td>
<td>142</td>
<td>83</td>
<td>15</td>
</tr>
<tr>
<td>Smallholders</td>
<td>(44)</td>
<td>142</td>
<td>83</td>
<td>15</td>
</tr>
<tr>
<td>Widows</td>
<td>(15)</td>
<td>343</td>
<td>90</td>
<td>7</td>
</tr>
<tr>
<td>Single Women</td>
<td>(17)</td>
<td>472</td>
<td>100</td>
<td>139</td>
</tr>
<tr>
<td>Elderly and Single</td>
<td>(6)</td>
<td>519</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Servants</td>
<td>(6)</td>
<td>519</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>(200)</td>
<td>294</td>
<td>69</td>
<td>307</td>
</tr>
</tbody>
</table>
of seed sown. The correlation between numbers of oxen and numbers of acres under crop for this group of 64, $R = +0.85$, was highly significant statistically, suggesting that for this sample the number of plough oxen is a reasonable predictor of holding size. Tenants who owned 16 oxen or more were notionally capable of working two plough gates of land. At Panmure this represented upwards of 100 Scots acres (126 English statute acres) under crop in any year. Such farmers were comparatively large-scale operators, and it is among this group that one might expect to find signs of production for the market and capital accumulation. Tenants who owned between 8 and 15 oxen, with between 50 and 100 Scots acres (63–126 statute acres) under crop at any time, would still have needed to be self-sufficient in labour, capital and equipment and are likely to have operated more or less independently even when they leased holdings on multiple-tenant farms. Such farmers might also be expected to have had some commitment to commercial production and some opportunity to accumulate capital. Tenants who owned fewer than 8 oxen would not have been able to furnish their own plough team without co-operating with their neighbours. One would expect them to have had little market orientation and to have been closer to the margin of subsistence. If this was so it should have been reflected in the possession of only limited assets and possibly also in a tendency towards proportionally higher levels of debt than the other groups of tenants.

The cottars and smallholders include people who were designated ‘cottar’ in their testaments or who were described as being ‘in’ a particular farm but do not appear as tenants on the estate rentals. Smallholders leased an acre or two of arable land but did not own any plough oxen. The category of servants includes both domestic servants at Panmure House and farm servants. Widows and unmarried women formed another distinct group; a final category comprised men who were described as elderly or who were unmarried and who did not fit into any other group.

Table 1 shows the high proportion of people who were involved in credit to some degree: 69% as creditors and 70% as debtors, including people at all levels from tenants to farm servants. The figure for creditors is higher than the 40% found by Holderness for a larger sample of English probate inventories from the late seventeenth and early eighteenth centuries but the representation of various social groups and the social structures undoubtedly differ between the two samples.9 Clearly there were surplus resources within the rural community and mechanisms for their investment. Only 2% of the people whose testaments were studied were not involved in some aspect of credit. There were, however, variations in patterns of lending and borrowing between different groups. 96% of all tenants had some debts while the figure for cottars and smallholders was only 53%, for widows and single women 10% and for the small group of servants none at all.

The testaments show that various forms of credit existed. Rent arrears and unpaid servants’ fees formed a significant part of the debts of most tenants. Money could also be lent on bond or by unsecured loans. Another source of credit was deferred payment for goods, agricultural produce and services. Table 2 gives a
breakdown of the assets and debts of the tenants. Clearly the mean values for farm stock, assets and debts were in step with holding sizes. The ratios show that the relationship between the level of cash assets and the value of farming stock also varied between the three groups. Mean cash assets amounted to half the average value of farming stock for tenants of larger holdings but to only a third for the middle group and a fifth for small tenants, suggesting that the first group had built up proportionally greater capital reserves. Nearly a quarter of the tenants of large holdings had assets which were greater than the value of their farm stock but this figure fell for the other groups. Tenants of small holdings were also more likely to have debts which exceeded the value of their farm stock and other assets combined. There was, however, less difference between the three groups in terms of the ratio of total debts to the value of farm stock and assets.

The pattern suggests that many tenants of large holdings were able to accumulate a modest amount of capital and that relatively few tenants, even among those with smaller holdings, were seriously in debt. While larger holdings gave their occupants an edge in profitability, few tenants had accumulated reserves which would have been sufficient to tide them over more than a single bad year. If the value of farm stock is ignored, average debts exceeded average assets for all three groups. 77% of the tenants of larger holdings had debts exceeding assets and the figure rose to 85% for small tenants.

This crude analysis makes the position of the tenants seem worse than it was because it does not distinguish between different types of debt. A major component of debts owing by tenants was rents and servants' fees due for the current year. In most cases these would have been met from the profits of that year's farming activity, and so these debts should be set against the value of farm stock, which included estimates of the likely yield and value of sown crops, and the market price of grain in the barn, rather than against capital assets. Rents due for
the current year made up less than a third of the debts owing by the tenants of large holdings, but for the middle group of tenants the figure rose to 41% and for small tenants to 50%. If current rents and servants’ fees are subtracted from the total debts, then the average figures for the remaining debts are in balance with the cash assets (excluding farm stock) of large tenants, and slightly better than in balance for the middle group. The tenants of smaller holdings still had debts which exceeded their assets.

This analysis also shows that a greater proportion of the debts of farmers with larger holdings was made up of other kinds of credit than was the case with smaller tenants. These included money borrowed on bond, on unsecured loans, and money due for purchased goods. It is impossible to separate these categories with complete confidence, although an attempt has been made to do this for tenants and cottars, the principal classes of debtor, in Table 3. Money lent on bond is often identified specifically in testaments while in other cases the inclusion of appended sums for annual rents indicates the existence of a bond. It is harder to distinguish between unsecured loans, which were generally smaller than amounts lent on bond, and sums of money due on goods which had been sold or purchased, i.e. credit by deferred payment.

Table 3 shows that tenants of larger holdings were more likely to borrow money on bond, usually in larger sums, than other tenants and that unsecured loans formed a greater proportion of the debts owed by all other groups. Table 4 shows the origins of the capital borrowed by tenants and cottars. Tenants of larger holdings were able to attract a significant amount of credit from the burghs though this figure may be inflated by money due on unspecified sales of agricultural produce. The importance of the towns as a source of finance declined sharply for tenants in the middle category and was negligible for small tenants and cottars.

### Table 3. Debts Owed by Tenants and Cottars, excluding Rents and Fees

<table>
<thead>
<tr>
<th></th>
<th>Average Debts £ Scots</th>
<th>% Due by Bond</th>
<th>% on Unsecured Loan</th>
<th>% Due by Deferred Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Tenants</td>
<td>824</td>
<td>33</td>
<td>64</td>
<td>3</td>
</tr>
<tr>
<td>Medium Tenants</td>
<td>200</td>
<td>13</td>
<td>82</td>
<td>5</td>
</tr>
<tr>
<td>Small Tenants</td>
<td>92</td>
<td>16</td>
<td>70</td>
<td>14</td>
</tr>
<tr>
<td>Cottars and Smallholders</td>
<td>15</td>
<td>22</td>
<td>74</td>
<td>4</td>
</tr>
</tbody>
</table>

### Table 4. Origins of Money Owed by Tenants and Cottars

<table>
<thead>
<tr>
<th></th>
<th>Burghs %</th>
<th>Nobility %</th>
<th>Gentry %</th>
<th>Clergy %</th>
<th>Tenancy &amp; Lower %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Tenants</td>
<td>42</td>
<td>7</td>
<td>0</td>
<td>1</td>
<td>50</td>
</tr>
<tr>
<td>Medium Tenants</td>
<td>14</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>83</td>
</tr>
<tr>
<td>Small Tenants</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>95</td>
</tr>
<tr>
<td>Cottars and Smallholders</td>
<td>3</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>92</td>
</tr>
</tbody>
</table>
Most of the money which was borrowed by farmers originated within the rural population at the level of the tenantry and below. The lack of finance from the gentry support McFaulds’ suggestion that in Angus in the later seventeenth century they were net debtors rather than creditors.10

The average assets for each group (Table 1) provide an indication of where finance could be obtained within the rural society. Table 5 amplifies this with a breakdown of the mechanisms by which money was lent.

| Table 5. Methods by which Money was Lent within Rural Society |
|-----------------|-----------------|-----------------|-----------------|
|                  | Average Assets £ Scots | % Lent on Bond | % Lent on Unsecured Loan | % Due by Deferred Credit | * |
| Large Tenants    | 785             | 76             | 9               | 2               | 13 |
| Medium Tenants   | 395             | 75             | 20              | 1               | 4  |
| Small Tenants    | 79              | 24             | 71              | 1               | 4  |
| Cottars and Smallholders | 142     | 42             | 57              | 1               | 0  |
| Widows, Single Women | 343       | 84             | 8               | 8               | 0  |
| Elderly and Single Men | 472       | 55             | 44              | 1               | 0  |
| Servants         | 519             | 76             | 24              | 0               | 0  |

* Mostly rents due from Subtenants.

Clearly some tenants had sufficient reserves to be able to lend money and the tenants of larger holdings were sophisticated enough to lend most of it on bond. One tenant, James Melville in Camiston, who died in 1640,11 appears to have been a prominent moneylender with loans totalling £6,738 Scots to over 20 people, including the Earl of Panmure, the Panmure estate factor, and various Dundee merchants. Money lent on bond accounted for three-quarters of the assets of tenants in the two higher-size groups. The potential contribution of individual small tenants to the pool of credit was clearly limited but the large size of this group should not be forgotten. Cottars and smallholders lent a much greater proportion of their assets on bond. The apparent affluence of this group compared with the small tenants may seem surprising until it is remembered that cottars and smallholders had little farm stock and so had proportionally greater liquid assets. Cullen has made the point that in Ireland at this time farmers and artisans might appear to have had comparable lifestyles and to have seemed equal in terms of wealth, but in fact the farmers benefited from security of employment and cheap food and had greater total assets.12 In Scotland the position of cottars and small tenants may have been closer as both had access to at least some land. Unmarried servants, widows and elderly people must have been major sources of credit within rural society, as in England.13 They lent a higher proportion of their assets on bond than any other group. Presumably, with their more limited earning power they had, of necessity, to be businesslike. It should be remembered, though, that many of the categories used here are life-cycle stages rather than socio-economic groups. Some farm servants would have been sons and daughters of tenants and might, in addition to any savings from their fees, have obtained capital from their parents by
Economy and Society in Scotland and Ireland

Gift or inheritance. Widows of tenants would, under Scots law, have inherited at least a third of the farm stock and other assets belonging to their husbands. Some of the elderly men who had money to lend may have been retired tenants. Thus tenants and their families might have been net recipients of credit at some stages in their lives and net providers of it at others.

Table 6 shows who borrowed money from the various groups within the sample. The overall pattern was that most of the capital which originated within rural society stayed there. Very little went to the towns and a substantial proportion of money in this category was probably deferred credit on goods rather than loans. On the other hand 35% of the capital went to landowners, ranging from feuers, through lairds, to the Earl of Panmure himself. It was not uncommon for tenants to finance their landlord or neighbouring lairds and there were evidently close links in this respect between large tenants and the gentry, again confirming McFaulds' suggestion that the gentry were net creditors at this period.14 None of the tenants in the sample appears to have held land on wadset. Proprietors whose lands offered good security attracted relatively large loans from widows. Widows, especially of tenants, may have been particularly attractive to proprietors seeking loans because the social difference between them put the transaction on a more impersonal footing than when credit was obtained from fellow landowners. Borrowing from widows may have been preferable to accepting credit from tenants as the latter occupied land and could use non-payment of rent as a lever if the debt remained unpaid. The fact that landowners did borrow from the tenantry indicates that capital accumulation by farmers was possible, but at the same time it demonstrates that obtaining annual rents on loan was a principal way of putting money to work, and emphasises the tenants' exclusion from the land market.

Table 7 shows the pattern of capital accumulation for tenants over three time periods, 1600–29, 1630–59 and 1660–99, measured by the ratio of their cash assets to the value of their farm stock. The periods were chosen with major price fluctuations in mind. The first thirty years of the seventeenth century were characterised by frequent subsistence crises, notably in 1622–23, while the middle period spanned the disruptions of the Great Rebellion. The period from 1660 to the mid-1690s was characterised by generally low grain prices.15 Given that rents
at Panmure were mostly stable throughout the seventeenth century, it can be suggested that price levels would have been one of the most important influences determining capital accumulation by the tenantry. Bowden has pointed out that in England during the sixteenth and early seventeenth centuries small farmers, with only a limited surplus, found it hard to accumulate capital no matter how prices varied. In years of grain shortage they did not have sufficiently large surpluses to benefit from the high prices, while in years of plenty their small surpluses generated little income due to the low price levels.

It is considered that Panmure tenants would have had more opportunity to accumulate capital during a period of good harvests with low prices than during years of high price when low yields would probably have robbed them of any surplus which they could market. Table 7 supports this argument, showing that the period after 1660 benefited tenants more than the first sixty years of the century. On the other hand the benefit was not spread evenly. Tenants with larger holdings did better than those with smaller ones. There was a distinct improvement in the position of tenants of larger holdings in the later seventeenth century. Tenants with medium-sized holdings also appear to have accumulated more capital during the course of the century though less markedly, while small tenants failed to improve their position at all. If this trend occurred more generally in Lowland Scotland, the implication is that during the later seventeenth century rural society was becoming more stratified in terms of wealth, a trend which would have been reinforced by changes in holding structures, with a tendency towards amalgamation and the creation of larger units. If this trend continued during the eighteenth century, after the recovery from the disastrous 1690s, one can see how tenants with larger farms and greater reserves of capital would have been in a better position to adopt the improvements advocated by enthusiastic landowners than tenants with smaller holdings. Such tenants would have been poised to benefit from rising prices and the increase in output generated by improved farming techniques. The role of agricultural improvement in creating the class of capitalist farmers which had begun to emerge by the end of the eighteenth century has been studied but less attention has been paid to the possibility that long-term trends in capital accumulation and its distribution within rural society might have aided the adoption of such improvements.

This study has demonstrated that, on one estate, far from being uniformly poor, marked contrasts in levels of wealth existed within the tenantry and among the rural population in general. Credit mechanisms were well developed among the inhabitants of the Panmure estates and were utilised almost universally to varying

### Table 7. Capital Accumulation over Time

<table>
<thead>
<tr>
<th>Year</th>
<th>Ratio of Assets to Farm Stock</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Large Tenants</td>
</tr>
<tr>
<td>1600-29</td>
<td>Insufficient Data</td>
</tr>
<tr>
<td>1630-59</td>
<td>0.37</td>
</tr>
<tr>
<td>1660-95</td>
<td>0.60</td>
</tr>
</tbody>
</table>
degrees. The kinds of credit which were available, the ways in which they were used, and the sources from which they were derived bear close comparison with England during the same period. On the other hand, the capital reserves, even of the tenants of larger holdings, were relatively modest. It seems likely that most of the available credit was used to weather short-term difficulties rather than to finance long-term expansion. There are indications, however, that capital accumulation increased during the seventeenth century, particularly among the more substantial tenants. This suggests that the combination of better harvests with more stable economic and political conditions during the later seventeenth century generated some modest prosperity for farmers despite influences which worked against the acquisition of wealth, including the disadvantages of low grain prices. Larger tenants, with economies of scale, appear to have been better placed to benefit than those with smaller holdings. On the other hand, the resources of even the larger tenants seem to have been insufficient to allow them to survive more than a single bad year without accumulating serious debts. The disaster of the later 1690s may not have caused widespread starvation and displacement among the Panmure tenantry, but it may still have wiped out the hard-won profits of the preceding favourable years. Nevertheless, it suggests that in the long term agriculture was generating greater profits for larger farmers and that during the seventeenth and early eighteenth centuries rural society may have been becoming more markedly polarised. A tendency towards the creation of larger holdings at this period has been noted. This has usually been attributed to estate policy: the creation of more commercially viable units. Such a process would undoubtedly have increased the contrast between prosperity and poverty within rural society. On the other hand this trend could have been the result of growing inequalities within rural society which allowed a limited number of farmers to take on larger tenancies. Although space does not permit a detailed review of the evidence, there are indications that the distribution of holdings at Panmure was slowly changing during the later seventeenth century, with an increase both in the numbers of large independent holdings and in crofts which were too small to provide a full-time living. At the same time there was a fall in the proportion of middle-range holdings, which required full-time working but were too small to be more than on the margins of profitability. The process was gradual and does not seem to have been due to any concerted policy by the estate. Such structural changes may have been initiated from below by shifts in the distribution of wealth among the tenancy caused by contrasts in the degree to which different groups were able to accumulate capital. If these trends continued during the first half of the eighteenth century, it is probable that the growing polarisation of rural society which has been considered the result of landlord policy may have been generated in part by changes within the farming community itself.

It must be emphasised, however, that only a single case study has been considered here. Before we can evaluate the full significance of the mechanisms of debt and credit which existed, and make estimates of the profitability of agriculture for different social groups and at different periods, more detailed studies are needed. We also need to know more about other elements which
affected the accumulation of wealth. These include patterns of inheritance among the tenantry; the role of rural industries, particularly textiles, as generators of income; levels of rent; the extent to which the profitability of tenant farming was reduced by the retention of rents in kind and labour services; and variations in the distribution of holding sizes from estate to estate and region to region. If capital accumulation by farmers did increase during the late seventeenth century, how was the extra profit generated: from arable farming or from a greater involvement in livestock? Although it has not been possible to review here all the authors’ findings, it is hoped that enough have been presented to indicate something of the level of detail which is possible for studies of what has often been dismissed in the past as a large but silent majority in Scottish rural society.

NOTES


18. Ibid.
The Geographical Mobility of Women in Early Modern Scotland

Ian D Whyte and Kathleen A Whyte

INTRODUCTION

Historical sources relating to pre-industrial European societies are heavily biased towards documenting the activities and concerns of men. Until recently, Scottish historiography has followed a similar path. However, social historians in many countries are beginning to redress the balance by studying the roles of women within the family, the community and society at large. These new approaches have only just begun to influence Scottish social history.

The lack of attention paid to women has been a characteristic of research into migration and population mobility in pre-industrial Europe. This is partly a function of the available data. Many sources which contain information on migration, such as apprenticeship records, are almost exclusively male-oriented. Other types of records, such as court depositions, include some women but are heavily biased towards men. Nevertheless, it is clear from many studies that the movements of women formed an important element in population mobility in the past. In his pioneering study of migration patterns in nineteenth-century Britain, Ravenstein put forward a number of 'laws' of migration—more strictly hypotheses. One of these was that women were more migratory than men within their county of origin but that men formed a greater proportion of long-distance migrants. Thus Ravenstein established that women were an important element in migratory populations. He also indicated that their migratory patterns—and hence possibly the reasons for their movement—were different from those of men. While the importance of female migration in the mid-nineteenth century is readily discernible from census records it is harder to establish its significance in earlier times.

Some aspects of female migration have been explored for England and other countries in the early modern period. Marriage distances have frequently been used as a surrogate measure of the degree of social interaction between communities. Despite this, female mobility has rarely been accorded
specific attention and there are indications that its scale and importance may have been underestimated.\(^8\) Studies of population mobility in early modern Scotland have been limited until recently, but it has now been shown that the Scots, notably migratory in the nineteenth and twentieth centuries, were also highly mobile in earlier times.\(^9\)

Within the space available it is impossible to consider every aspect of female mobility in early modern Scotland. Marriage mobility was undoubtedly an important element in the turnover of the rural population,\(^10\) while the temporary migration of young girls from the Highlands to help with the Lowland harvest became increasingly important during the eighteenth century.\(^11\) However, the contribution of women towards these types of population movement in Scotland has already received some attention. Instead, this essay will focus on the female contribution to three aspects of geographical mobility within Scotland which have been shown by previous research to have been important in other early modern west European societies: migration to the towns, the mobility of servants, and vagrancy.

Migration to the larger towns has been identified as an important influence on the social structures of both source areas and destinations. Urban immigration was vital in allowing large towns and cities to maintain their populations and increase in size.\(^12\) Equally important were its effects on rural areas, draining off surplus population in a relationship which could have both a positive and a parasitic side.\(^13\) Scotland has often been viewed as a country in which towns had a comparatively small impact during early modern times. Recently, however, the rate of urban growth in Scotland from the sixteenth to the eighteenth centuries has been re-assessed and it is clear that, by the later eighteenth century, Scotland was one of the most highly urbanised countries in Europe.\(^14\) This suggests that the scale and importance of migration to the towns, including the influx of women as domestic servants, has been underestimated.\(^15\)

The localised but frequently-repeated moves of domestic and farm servants from one short-term contract to another was one of the most significant influences behind the high levels of turnover of the rural population in England.\(^16\) Similar patterns of service existed in Lowland Scotland in early modern times and, indeed, farm service remained important into the twentieth century long after the system had declined south of the Border.\(^17\) Servants also existed in the Highlands during the seventeenth and eighteenth centuries although less is known about their characteristics. Service of this kind appears to have been as usual in Scotland for women as for men, but the contribution of women to patterns of servant mobility has not been considered in detail.

Vagrancy remained important to a later date in Scotland than in England. This was partly due to the poverty of much of society before the later eighteenth century. A substantial proportion of the urban and rural population lived on, or close to, the poverty line and it only took slight additional misfortunes to set them on the roads as vagrants.\(^18\) The lack of strict settlement laws comparable to England from the later seventeenth century and the availability of at least some charity from kirk sessions as well as from individuals may have encouraged vagrancy in Scotland.\(^19\) In addition, the continuation of major subsistence crises in the Lowlands until the end of the
seventeenth century, and in the Highlands throughout the eighteenth century, caused periodic surges of vagrancy. The importance of women as an element in the vagrant population has been demonstrated for England, but the distinctive experiences of female vagrants in Scotland have received little attention.

These three types of movement do not encompass every aspect of female mobility in early modern Scotland but they were clearly among the most important aspects. The sections that follow attempt to evaluate their scale and importance as well as exploring their characteristic features.

MIGRATION TO THE TOWNS: THE EXAMPLE OF EIGHTEENTH-CENTURY EDINBURGH

Migration to larger towns and cities has been seen as one of the most important dynamic elements in the economy and society of early modern Europe but most previous work on this topic has utilised sources which are heavily biased towards men. Despite the recognition that women were a major element among urban migrants. However, the format of some Scottish urban marriage registers allows the study of the migration of women into some of the major towns before, as well as at marriage. As urban marriage registers have not hitherto been used in this way some introductory comments about their content will be useful.

Where a marriage register records a woman as living in a particular town when her banns were proclaimed and her father as living elsewhere, then a migratory move between her original home and the town had probably been made. In most cases before, rather than at marriage. With irregular marriages, which became increasingly common in Scotland during the later eighteenth century, the period of residence in the town prior to marriage may sometimes have been brief. In most instances, however, the move is likely to have been made well before marriage for the purposes of employment.

Although registers rarely differentiate between first and subsequent marriages it can be assumed that a substantial proportion of the women involved were fairly young and that many of them had moved to the town to enter domestic service. Such data provide a female counterpart to apprenticeship migration which has frequently been studied in the past. Indeed, because marriage registers generally record the parish rather than the place of origin of women it is possible, for example, to identify the origins of a higher proportion of female migrants to Edinburgh during the eighteenth century than for apprentices moving to the city. As with virtually all sources relating to migration in early modern times one cannot assume that a single move between home and town had always been made or that, in this case, a father’s parish of residence was necessarily always that of his daughter’s birth. Nevertheless, given the abundant evidence that most mobility within the countryside took place over limited distances, in a high proportion of cases this is likely to have been a close approximation to the truth. Minor
discrepancies of this kind should not prejudice large-scale aggregative analysis of migration patterns.

Where the residence of a woman was recorded in a marriage register as being with her father in a parish outside the town then presumably migration occurred at, rather than before, marriage. In such cases the contact leading to marriage may have arisen in various ways. The groom may originally have come from the bride’s place of residence and kept in touch after migrating to the town. Alternatively the bride may have lived in the town for a period of time, met her future marriage partner there and returned home prior to marriage. These two sets of circumstances would tend to produce a pattern of migration similar to that of women moving into a town before marriage. A third possibility is that initial contact between bride and groom was made during regular trips into or out of the town by one of the partners. Contacts of this kind would involve a more local field of interaction between the town and its immediate hinterland corresponding to the ‘marriage distances’ of previous studies. Without supplementary evidence it is impossible to distinguish between these and other possible sets of circumstances. However, the influence of purely local marriage contacts should tend to reduce the average distance migrated by women at marriage compared with those migrating before marriage. The same should apply to situations where women resident in a town married partners living in parishes elsewhere. In such cases one would expect that the woman concerned would normally have migrated out of the town at marriage, and that contact with their partners before marriage had been produced by similar sets of links to women moving into a town at marriage.

It is not feasible to attempt here even a brief discussion of patterns of female migration into all of Scotland’s larger towns at this period. A review of female migration into Edinburgh will, however, illustrate many of the general patterns and problems involved in studying female urban immigration. The importance of migration to capital cities during the early modern period, particularly its demographic and modernising effects on society as a whole, has often been stressed though again attention has concentrated on male migrants. Although female migration to Edinburgh exhibited features which may have differed in degree from movements into smaller Scottish towns, the use of Edinburgh as a case study does allow comparison with work on migration to capitals and provincial centres elsewhere. In considering the movements of women into other Scottish towns it should, however, be noted that the quality of urban marriage registers is often much poorer than in the ideal situation described above. Those for the city of Glasgow, for instance, do not even record the origins of brides, far less any details of their fathers’ occupation and residence, until 1756. Fortunately the marriage registers for the royal burgh of Edinburgh are sufficiently full to allow a detailed analysis of the movement of women into the city throughout the eighteenth century though not, unfortunately, for the seventeenth. The registers give, for most brides, the name, occupation and domicile of their fathers and also indicate the place of residence of the bride if this was different. This provides a data base of over 30,000 migrants.
GEOGRAPHICAL MOBILITY OF WOMEN IN SCOTLAND

TABLE 1
MIGRATION OF WOMEN TO EDINBURGH IN THE EIGHTEENTH CENTURY

<table>
<thead>
<tr>
<th>Year</th>
<th>Women migrating to Edinburgh before marriage</th>
<th>Women migrating to Edinburgh at marriage</th>
<th>Women migrating from Edinburgh at marriage</th>
<th>Men migrating to Edinburgh</th>
</tr>
</thead>
<tbody>
<tr>
<td>1701-10</td>
<td>54.9 km</td>
<td>41.8 km</td>
<td>49.1 km</td>
<td>77.8 km</td>
</tr>
<tr>
<td>1711-20</td>
<td>64.7</td>
<td>38.8</td>
<td>32.9</td>
<td>62.0</td>
</tr>
<tr>
<td>1721-30</td>
<td>60.0</td>
<td>46.4</td>
<td>40.7</td>
<td>71.8</td>
</tr>
<tr>
<td>1731-40</td>
<td>61.4</td>
<td>41.9</td>
<td>40.6</td>
<td>86.2</td>
</tr>
<tr>
<td>1741-50</td>
<td>68.3</td>
<td>40.8</td>
<td>38.2</td>
<td>75.9</td>
</tr>
<tr>
<td>1751-60</td>
<td>67.7</td>
<td>42.9</td>
<td>47.2</td>
<td>95.6</td>
</tr>
<tr>
<td>1761-70</td>
<td>66.2</td>
<td>47.5</td>
<td>44.2</td>
<td>97.4</td>
</tr>
<tr>
<td>1771-80</td>
<td>67.7</td>
<td>56.5</td>
<td>50.3</td>
<td>82.1</td>
</tr>
<tr>
<td>1781-90</td>
<td>77.8</td>
<td>48.0</td>
<td>46.0</td>
<td>100.4</td>
</tr>
<tr>
<td>1791-1800</td>
<td>62.9</td>
<td>61.2</td>
<td>56.5</td>
<td>74.0</td>
</tr>
</tbody>
</table>

Table 1 shows the mean distances migrated by various categories of women moving to and from Edinburgh. As measurement of the distances between Edinburgh and the thousands of places of origin would have been extremely time consuming the distances have been calculated using an average figure for each county of origin. This figure was obtained by measuring the nearest and furthest point of each county from Edinburgh and taking the mean value. This technique has been used in previous studies of apprenticeship migration to Edinburgh and London. There was a clear difference in the average distances migrated by women before marriage and at marriage, the latter moving over shorter distances. Supporting the idea that many marriages in this group were generated by everyday contacts between the inhabitants of the city and its immediate hinterland. The mean distances for all groups are surprisingly high, even in the early eighteenth century. Women moving to Edinburgh before marriage, many of them probably as domestic servants, tended to come from further afield than apprentices. In addition, there was a widening of the migration field during the eighteenth century despite the rapid growth of other Scottish cities. This contrasts with the contraction which has been noted for apprentices migrating to Edinburgh and the trend was only really reversed during the last decade of the century. Overall the pattern corresponds more closely to migration to London during the later sixteenth and early seventeenth centuries that at a later date when the growing industrial towns began to reduce migration to the capital from northern England. The implication is that there was a substantial time-lag in the development of Scottish migration fields and that the truly national pattern of migration to Edinburgh was only starting to become curtailed at the end of the eighteenth century.

Table 2 shows the changing pattern of migration of women to Edinburgh before marriage by region. There was clearly a local hinterland, including the Lothians, Fife and the Borders, from which a high and fairly stable proportion of migrants were drawn throughout the century. The North East and Tayside both provided a growing percentage of migrants on the middle of the century with a subsequent drop. The proportion of migrants drawn from the western
Previous studies would give many Scots a reason to expect that the migration of women to
England increased by over eleven times between the first decade of the century and the 1780s, a rate of growth comparable with that of Highland migrants. Growing contact with England in the decades following the Union must have provided an increasing pool of local opportunities which diverted potential migrants away from Edinburgh.

The most remarkable feature of Table 2, however, is the steady increase in the proportion of the migrants drawn from Highland counties from a mere 1.2 per cent in the first decade of the eighteenth century to 11.6 per cent in 1780-99. At a general level this reflects the growing integration of the Highlands with the rest of Scotland, particularly after the 1745 Rebellion. The Highlands may have been a source of cheap domestic labour for the capital. However, it must also be remembered that Edinburgh was an important assembly point for Highland girls who came to help with the Lothian harvest. Many of these girls may have met and married local men.

Another notable feature of Table 2 is the increasing proportion of women originating from south of the Border. The percentage of women moving from England increased by over eleven times between the first decade of the century and the 1780s, a rate of growth comparable with that of Highland migrants. Growing contact with England in the decades following the Union must have been an underlying influence with notable increases in the 1720s and 1770s. The two most significant origins are Northumberland—many Scots were employed as keelmen on the Tyne—and London. Many of the women moving to Edinburgh may have been the daughters of expatriate Scots.

This tabular presentation is a relatively simple form of analysis. It only gives a general impression of the effects of increasing distance on the flow of female migrants to Edinburgh and it does not indicate whether levels of migration from any area were high or low in relation to their populations. Previous studies would lead one to expect that the migration of women to

### Table 2

<table>
<thead>
<tr>
<th>Region</th>
<th>1701</th>
<th>1711</th>
<th>1721</th>
<th>1731</th>
<th>1741</th>
<th>1751</th>
<th>1761</th>
<th>1771</th>
<th>1781</th>
<th>1791</th>
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</thead>
<tbody>
<tr>
<td>Lothians</td>
<td>37.7</td>
<td>35.0</td>
<td>37.7</td>
<td>38.3</td>
<td>35.7</td>
<td>35.0</td>
<td>36.7</td>
<td>37.1</td>
<td>33.6</td>
<td>38.1</td>
</tr>
<tr>
<td>Borders</td>
<td>10.6</td>
<td>9.0</td>
<td>8.2</td>
<td>8.9</td>
<td>8.1</td>
<td>6.5</td>
<td>7.5</td>
<td>6.8</td>
<td>6.8</td>
<td>8.2</td>
</tr>
<tr>
<td>Fife</td>
<td>19.7</td>
<td>14.8</td>
<td>15.1</td>
<td>18.5</td>
<td>16.3</td>
<td>14.5</td>
<td>15.5</td>
<td>15.6</td>
<td>17.1</td>
<td>19.8</td>
</tr>
<tr>
<td>Tayside</td>
<td>6.8</td>
<td>11.5</td>
<td>9.8</td>
<td>10.0</td>
<td>13.2</td>
<td>13.7</td>
<td>14.2</td>
<td>14.4</td>
<td>11.5</td>
<td>6.7</td>
</tr>
<tr>
<td>Borderlands</td>
<td>4.9</td>
<td>5.0</td>
<td>5.6</td>
<td>6.4</td>
<td>7.2</td>
<td>8.2</td>
<td>5.2</td>
<td>4.9</td>
<td>2.8</td>
<td>3.0</td>
</tr>
<tr>
<td>South West</td>
<td>3.4</td>
<td>3.0</td>
<td>2.5</td>
<td>2.9</td>
<td>3.4</td>
<td>3.7</td>
<td>2.7</td>
<td>2.4</td>
<td>1.7</td>
<td>2.4</td>
</tr>
<tr>
<td>East Central</td>
<td>12.5</td>
<td>14.5</td>
<td>15.8</td>
<td>9.6</td>
<td>10.2</td>
<td>9.0</td>
<td>8.2</td>
<td>7.3</td>
<td>9.3</td>
<td>10.6</td>
</tr>
<tr>
<td>Highlands</td>
<td>1.2</td>
<td>2.4</td>
<td>3.4</td>
<td>3.3</td>
<td>5.8</td>
<td>5.8</td>
<td>5.9</td>
<td>7.0</td>
<td>11.6</td>
<td>7.3</td>
</tr>
<tr>
<td>N. Isles</td>
<td>0.9</td>
<td>1.6</td>
<td>0.3</td>
<td>1.2</td>
<td>1.0</td>
<td>1.5</td>
<td>1.5</td>
<td>0.6</td>
<td>1.0</td>
<td>0.6</td>
</tr>
<tr>
<td>Northumberland</td>
<td>0.4</td>
<td>0.2</td>
<td>1.1</td>
<td>0.5</td>
<td>0.6</td>
<td>1.0</td>
<td>1.2</td>
<td>1.3</td>
<td>1.6</td>
<td>1.5</td>
</tr>
<tr>
<td>London</td>
<td>0.0</td>
<td>0.0</td>
<td>0.3</td>
<td>0.7</td>
<td>0.4</td>
<td>0.4</td>
<td>0.7</td>
<td>0.7</td>
<td>1.2</td>
<td>1.1</td>
</tr>
<tr>
<td>England</td>
<td>0.4</td>
<td>0.4</td>
<td>1.5</td>
<td>1.7</td>
<td>1.5</td>
<td>2.2</td>
<td>2.5</td>
<td>4.0</td>
<td>1.6</td>
<td>4.1</td>
</tr>
</tbody>
</table>
Edinburgh was related positively to the populations of the areas of origin and negatively to increasing distance from the capital. A more refined form of analysis is the technique of log-linear modelling using Poisson regression analysis. The statistical basis of this technique and its interpretation have been described by the authors in previous study of apprenticeship migration to Edinburgh and need not be repeated here. It should, however, be emphasised that the technique makes it possible to relate the numbers of migrants from any source area—in this instance a county—to the population of that source area and its distance from the destination, providing a set of predicted values which would occur if the relationship between migrants on one hand and population and distance on the other was a perfect one. Differences from these predicted values, or ‘residuals’, highlight areas from which levels of migration were unusually high or low.

Poisson regression analysis of women migrating to Edinburgh was carried out for three decades; 1701–10, 1751–60 and 1791–1800. For the last two of these periods Webster’s census of 1755 and the first official census of 1801 provided population data. For 1701–10 the only near-contemporary population data are those which can be derived from the hearth and poll tax records of the 1690s. Both these sources are incomplete in their geographical coverage, and population estimates calculated from them are liable to considerable error. For this reason it was decided to relate migrants during the period 1701–10 to the 1755 population data which at least have the merit of complete coverage and reasonable accuracy. It has been suggested that Scotland’s total population in 1755 was little different from that of the early 1690s and differences in population distribution between the two periods were probably not sufficiently great to invalidate the exercise.

Figure 1 shows the pattern of residuals by county for the three periods. In 1701–10 it is clear that virtually all the Highland counties were providing fewer migrants than their distance from Edinburgh and their populations would have led one to expect. This is hardly surprising considering the extent of the divide in Scottish society between Highland and Lowland at this time. Much of eastern Scotland from Shetland to Roxburghshire supplied the numbers of migrants predicted or substantially more. This was a feature of apprenticeship migration to Edinburgh at this period, emphasising perhaps the importance of trading contacts between Edinburgh and other east-coast areas, particularly by sea, in generating the information flows which led to migration. There were also higher than predicted levels of migration from some counties in central, western and south-western Scotland. Negative residuals for Dunbarton, Renfrew and Lanarkshire suggest the effects of competition from Glasgow but also indicate that the city’s pull was still fairly localised. The negative residual for Fife may reflect the competing influence of Perth and Dundee as well as those of the many smaller burghs within the county.

By the mid eighteenth century this pattern was beginning to change. Most noticeable is the decline in levels of migration from Ayrshire and some Border counties, as was the case with apprentices. Edinburgh’s migration field for women within southern Scotland was contracting markedly. On the other
FIGURE 1 Poisson regression analysis of migration of women to Edinburgh before marriage.
hand this was more than counterbalanced by a growing flow of women to Edinburgh from the north. Increased contact with the Highlands is reflected in the positive residuals for Inverness and Ross while Argyll and Perthshire, strongly negative in the early eighteenth century, were starting to move towards a more positive balance.

By the end of the eighteenth century the pattern of movement of women to Edinburgh was markedly different from the first cross-section. A core area surrounding the Firth of Forth still supplied more migrants than predicted but for almost all of the remainder of southern Scotland levels of migration were lower than expected. In west-central Scotland this is likely to reflect the pull not only of Glasgow but also many other rapidly-growing urban centres such as Greenock, Kilmarnock and Paisley. In the south east the attraction of Tyneside may lie behind the negative residuals for the Border counties. In a similar way the growth of Dundee and the expansion of textile manufacture in its hinterland may explain the low levels of female migration to Edinburgh from Forfarshire and Kincardineshire. On the other hand virtually the whole of the Highlands and Northern Scotland from Perthshire to Caithness and the Northern Isles were providing more migrants than their population levels and distance from Edinburgh would have led one to expect. Even Argyllshire, which lay within the orbit of Glasgow, did not record a markedly negative figure.

This study of female migration to Edinburgh has demonstrated parallels with work on migration (generally male) into other early modern cities but also some very distinctive features. The mean distances migrated by women moving to Edinburgh before marriage were surprisingly high. The increase in mean migration distances during the eighteenth century contrasts markedly with the experience of London during the same period, as well as with the pattern of apprenticeship migration to Edinburgh.41 When the pattern of female migration to Edinburgh is analysed in more detail it can be seen that the increase in mean distances travelled is explicable in terms of the changing origins of the migrants. A decline in the proportions of women drawn from west-central and southern Scotland was more than balanced by an increase in those drawn from the Highlands and Northern Scotland. This caused the average migration distance to increase despite a marked contraction of the city’s migration field over much of the Lowlands in the face of increasing competition from other rapidly-growing towns. This contraction has clear parallels with England42 but south of the Border there was no counterpart to the Highlands as an area which had generated few long-distance migrants in the past but which now produced an ever-increasing stream. In some respects Ireland may have performed for England a comparable function.

Although the pattern of female migration before marriage to Edinburgh differed from that of apprentices it should be noted that apprentices were becoming an increasingly unrepresentative group.46 The data on the migration of men to Edinburgh presented in Table 1, drawn from a much wider range of social strata than apprentices, clearly follow the same pattern as for women but with a tendency for men to migrate over greater average distances, a feature of movement to towns first emphasised by Ravenstein.47 By contrast
the pattern of migration of women into and out of the city at marriage showed less variation during the century, emphasising the stable nature of everyday contacts within the local hinterland of Edinburgh.

Some features of female migration to Edinburgh operated in other, smaller towns. Migration to the manufacturing centre of Kilmarnock during the mid eighteenth century showed the same contrast between a local marriage-migration field and a wider hinterland from which unmarried girls were recruited, both migration fields being scaled down to the levels appropriate for a much smaller centre. Further work on Scottish marriage registers may make it possible to establish more clearly the contrasts in migration patterns between towns of different sizes and functions. There were, for example, differences in patterns of movement into the new manufacturing centres like Glasgow, Paisley and Hamilton on one hand and the old-established regional service centres like Aberdeen, Dumfries, and Inverness on the other? The extent to which the migration fields of the major towns grew or contracted according to their economic fortunes, the existence of definite migration streams linking smaller centres with particular rural areas, and the rise of migration from the Highlands into other Scottish towns would all repay further study.

We have already seen how important female domestic servants were in Edinburgh and other large Scottish towns. However, large numbers of young women were also employed in the countryside as farm servants and it is to the mobility of this group that attention will now be turned.

FEMALE SERVANTS

Research on population mobility in England has emphasised that the movement of male and female servants between households at the end of short contracts was probably the biggest single component in local population movements within the countryside. Scottish rural society was also characterised by the almost universal presence of farm and domestic service and, unlike England where servants in husbandry declined in numbers during the eighteenth century, the system was maintained in Scotland with comparatively little change. 

Houston's study of population mobility in Scotland in the seventeenth and eighteenth centuries, based on the analysis of testimonials, has suggested that the frequent movement of servants over relatively short distances was also one of the most important elements in geographical mobility, with female servants tending to migrate at least as often as male ones. Women formed more than 50 per cent of the migrants in most of the parishes studied. Houston suggested that this reflected a greater demand for female than male servants in a mixed farming economy. The poll tax records for the 1690s show, however, that the percentage of female migrants is even higher than the ratio of male to female servants would lead one to expect. Houston was also able to demonstrate not only that single women moved more frequently than single
men but that in many parishes the average distances moved by women were greater than for men. This applied both to rural parishes like Dalmeny, Glencorse and Livingston and urban ones like Haddington and Prestonpans. Although migration at marriage, and vagrancy, may have contributed to the high levels of turnover of the women in Houston’s study there is little doubt that much of it was due to the movement of female servants between contracts.

Work as a farm or domestic servant for a period of years during adolescence and young adulthood would have been the normal experience for most women in Scottish rural society during the seventeenth and early eighteenth centuries. This is shown by the ubiquity of female servants in tenant households, and their frequent appearance in cottar households, in the poll tax lists of the 1690s. The limited numbers of daughters of tenants and cottars who were listed as still living with their families at the age of 16 and above shows that it was normal for the daughters of tenants and cottars to leave home by this age and go into service. It was, however, more common for the daughters of tenants to stay at home than those of cottars. Among tenant families in the 1690s sons tended to stay at home in greater numbers than daughters in some regions. In 20 parishes in the Lothians the number of sons over 16 in tenant families exceeded the number of daughters. This may have been because it would have been more advantageous for a tenant to keep a son at home on his holding than a daughter. To replace a son with a male farm servant would have cost twice as much in fees as to replace a daughter with a female servant.

The contrast between the experience of girls from tenant and cottar households probably grew during the eighteenth century. As the tenants of the increasingly large farms in many parts of the Lowlands became more prosperous there was less need for them to send their daughters into service and female servants became increasingly drawn from among the households of labourers and cottagers. By the end of the eighteenth century it was only in areas where tenanted holdings remained relatively small, like Aberdeenshire, that tenants’ daughters continued to go into service in large numbers.

In Aberdeenshire and particularly in Renfrewshire in the late seventeenth century the tendency to keep sons at home rather than daughters was less marked than in the Lothians. In Renfrewshire, with a more pastorally-oriented economy, the work of daughters in the dairy may have made them a greater asset while, with smaller areas of arable land, the need for sons as ploughmen may have been reduced. With cottar families in the Lothians the imbalance worked in the opposite direction. In 15 out of the 20 parishes there were more daughters of cottars at home than sons. The need to keep a son to do heavy labouring may have been less on a cottar holding than a tenant’s one as the ploughing was usually done for the cottar by the tenant while a daughter may have been able to contribute proportionally more to the family income by spinning and other work. Nevertheless, despite these differences it is evident that most children from tenant and cottar families did go into service.

Given that in the seventeenth century so few daughters in their teens stayed at home, service was almost inevitable because of the impossibility of young,
unmarried girls setting up house on their own. This was frowned upon by
the Church for moral reasons; young people were considered to require the
supervision of their elders, whether parents or master and mistress, and could
not be trusted on their own. These views were echoed by secular authorities
although their reasons were in many cases as much economic as moral. They
did not want young able-bodied people opting out of the labour force. For
example, the burgh council of Edinburgh legislated to prevent young women
from leaving service and setting up shops. In this case the reason was less
a desire to control women morally as to prevent them from competing
economically with burgesses. Moreover, given that the wages for women were
usually much lower than for men, it was economically difficult for young
women to live on their own. As custom, a desire for independence and sheer
necessity forced so many of them to leave home in their teens, and economic
and moral pressures prevented them from living alone: service was the principal
option. Only towards the end of the eighteenth century did the situation
start to change. Church discipline became less stern, or at least less enforce-
able, in the rapidly-growing towns where population turnover was so great
that it was hard for kirk sessions to keep track of individuals entering or
leaving the community in the way that had been possible a century earlier.
The income which could be derived from industrial activities like spinning
yarn, working in the bleachfields or embroidering muslins had risen
substantially. These two influences made it possible for young girls to set up
house on their own, though the ministers who contributed to the Old
Statistical Account still frowned on it.

In the late seventeenth century female servants formed some 9 to 10 per
cent of the pollable population (over the age of 16) in many rural parishes in
lowland Aberdeenshire or 18 to 20 per cent of the pollable women. In the
Lothians and Renfrewshire there was greater variations. In some upland
pastoral parishes south of Edinburgh, like Heriot and Stow, female servants
could make up 13 per cent or 14 per cent of the pollable population. The
higher figures in these areas may relate to the greater need for female servants
for dairy work and the reduced need for male farm servants in parishes where
the amount of arable land was limited. In many lowland, arable-oriented
parishes in the Lothians the proportion of female servants was similar to the
9 to 10 per cent of Aberdeenshire but in Dalmeny it rose as high as 15 per
cent. In parishes like this the reason for the high figures may have been
linked to the preponderance of relatively large holdings employing less cottar
labour and more servants, both male and female. In Renfrewshire the propor-
tion of female servants in the pollable population varied from about 8 to
12 per cent. There were relatively fewer female servants in parishes like
Eaglesham and the landward area of Paisley where textile manufacture was
important. In areas like these more girls may have remained at home to
spin yarn rather than go into service. In Renfrewshire there were fewer male
farm servants in relation to female ones, probably because the economy was
more geared towards pastoral farming with less need for ploughmen and
more for dairymaids, and perhaps too because weaving provided alternative
employment to agriculture.
Differences like these between parishes within the same region show that there was a good deal of local variation in the demand for female servants. This related to differences in the rural economy, to contrasts in farm structures between different estates making different demands on cottar and servant labour, and on the presence or absence of alternative sources of employment like textile manufacture. Such differences in themselves may have increased mobility among female servants in search of opportunities. Nevertheless, the purely local character of the movement of women into farm service is suggested by a comparison for parishes covered by the poll tax of the proportions of the pollable population made up of farm servants, and of daughters of tenants and cottars who were over 16 yet still living at home. Wherever the percentage of female farm servants was high that for daughters at home was correspondingly low and vice versa. In the landward part of Renfrew parish, for example, 14 per cent of the population were servants and only 4 per cent daughters at home whereas in Killean parish the corresponding proportions were 10 per cent and 9 per cent. Similar patterns occurred in the Lothians and Aberdeenshire. Similar patterns occurred. The closeness of this adjustment between servants and non-servants in the same age group suggests that most servants' posts were filled locally.

In the late seventeenth century female farm servants made up smaller proportions of the pollable population in areas like upland Aberdeenshire and Orkney. Their importance in the Highlands is less clear. Servants did occur in the Western Isles in the seventeenth century, and it is clear from the Old Statistical Account that in the late eighteenth century farm servants, both male and female, were an important element in the labour force from Highland parishes as widely scattered as Fortingall, Lismore and Appin, and Tongue. Nevertheless, it is not certain whether the institution of service, with hiring fairs, fixed-term contracts and high levels of turnover, was as well developed in the Highlands as in the Lowlands. If this was the case one might speculate whether in parts of the Highlands, if female servants formed a smaller proportion of the population, girls tended to marry at a younger age on average than in Lowland areas where service was more common. The tendency for early marriage in the Highlands in the eighteenth century, or even earlier, has been noted, and has the possibility that this area had a different demographic regime from the Lowlands with a more steady build up of population during the seventeenth and eighteenth centuries. Differences in the extent to which young girls went into service may provide one mechanism to explain such contrasts.

In the Lowlands too differences in the importance of service for young girls may hint at demographic variations. For the 1690s poll tax lists, if the proportion of younger women who were unmarried is calculated by adding the percentages of farm servants and daughters over 16 still resident at home, it is clear that in Renfrewshire a greater percentage of women were unmarried in many parishes than in the Lothians. This may possibly relate to the greater potential contribution which single women in the western Lowlands were able to make to the economy of small tenant holdings by dairy work and yarn spinning. Such variations also hint, obliquely, at regional differences in the extent of female mobility both before and after marriage.
A further element encouraging mobility among female servants was wage differentials. Although female servants generally received only about half the wages of male servants, the poll tax returns show that in the late seventeenth century there was nevertheless a marked gradation in their fees relating partly to age, but also probably to the kind of work they did. The fees of female servants on farms in the Lothians ranged from as little as £5 to £6 Scots per annum to as much as £18 though relatively few earned more than £12. The difference was probably linked to age and to differences in the level of skill and responsibility. Female servants working in the households of landed proprietors might earn more than farm servants; fees of £20 to £30 are recorded for some servants in such households in the Lothians though the women receiving them may have been older than most female farm servants. There are also some indications of differences in the going rate for female farm servants between parishes. In the upland pastoral parish of Stow, for instance, the median fee was £11 Scots per year while in lowland parishes in the Lothians it was £12. The difference is not marked and it is not clear whether it was linked to variations in the age structure of servants, the kinds of work undertaken, or competition from Edinburgh driving up wages in the surrounding rural parishes. Nevertheless, whether related to age, experience or locality such variations are likely to have encouraged mobility within a comparatively limited area as girls moved from farm to farm and parish to parish in search of better positions. The poll tax data suggest that average wages for female servants were lower in Aberdeenshire and Renfrewshire than in the Lothians but the degree of difference was relatively small and is unlikely to have generated long-distance mobility.

Contrasts in wage levels for female servants may have led to local mobility during the seventeenth century but probably not to much long-distance movement. By the end of the eighteenth century the situation was different. There was a marked national gradient in servants' fees and rates paid for female day labour between the north-west Highlands and the Lowlands where farmers faced increasing competition for their labour force from industry. The Old Statistical Account provides a good deal of information on the wages of female servants but it is not always clear whether the figures quoted for individual parishes are average or maximum rates. As a result many contrasts in wages between neighbouring parishes may be more apparent than real. The regional trends are, however, fairly clear. Farmers close to the developing manufacturing areas, such as those in Renfrewshire and north Lanarkshire, had to pay more than those in purely agricultural areas of the Lowlands like Galloway, the Borders and the Merse in order to attract suitable girls. Wages in many Renfrewshire parishes seem to have been at least 25 per cent higher than in other parts of southern Scotland. In the Highlands, however, the wages of female servants were far lower—a third or even a quarter of what a girl might have earned in most Lowland farming areas. The differential between north and south prompted long-distance migration from the Highlands to farm service in the Lowlands. The recruitment of servants from the far north may have helped Lowland farmers in areas where local girls were increasingly moving out of farming and into industry. For some Highland
parishes the Old Statistical Account gives the numbers of male and female servants and invariably the latter are far more numerous. This suggests that long-distance migration to Lowland farm service was more characteristic of men than women. It may have been that in a pastoral economy with comparatively little arable land it was easier to dispense with the services of young men, leaving young women at home to undertake herding and dairy work. Girls may have been more attracted by temporary migration to the south during the summer and autumn to work in the Lowland harvest than by longer-term farm service.

Female servants were usually slightly less numerous than male ones in the countryside but they greatly outnumbered them in the towns. In the 1690s they made up 19 per cent of the pollable population in Edinburgh, 23 per cent in Aberdeen and 18 per cent in Perth. The proportion of female domestic servants in towns was directly related to their size, occupational structure and wealth. In baronial burghs where merchant and professional groups were poorly represented and there was a concentration of less wealthy tradesmen the proportion of female servants could be less than in rural areas: in Dalkeith for example it was 8 per cent and in Musselburgh 7 per cent. The larger towns were an obvious magnet for female servants. Wages were not necessarily any greater than in the countryside. At the end of the seventeenth century the median wage for female servants in the Tolbooth Kirk parish of Edinburgh, £1.2, was comparable with that in surrounding rural parishes. In Aberdeen the median wage of £10 was comparable with that of nearby rural parishes like Belhelvie but greater than those for more distant parishes. In Edinburgh the wage structure for servant women was, however, more diversified. There may have been more very young girls performing domestic duties than in rural areas. Girls of 12 to 14 earned between £4 and £6 Scots per year while some servants, who were only given bed and board with no additional fees at all, may have been even younger. At the other end of the scale fees of over £20 were more common than in the countryside. Domestic service in a large town may also have been seen as more attractive and less hard than farm work.

On the basis of the poll tax data for Edinburgh and Aberdeen it can be estimated that the four largest Scottish towns would, in the 1690s, have employed some 12,000 female servants. This suggests that around one Scottish girl in ten between the ages of 15 and 24 would, at any time, have been working as a servant in one of the four main burghs. This emphasises the scale of the influx of girls from the countryside and also suggests that women may have accounted for a greater share of the flow of migrants to the large towns than men. A substantial proportion of the women migrating to Edinburgh before marriage, discussed above, must have been moving to the city to work as domestic servants but neither they nor their migration patterns can be isolated. Presumably girls moving to the larger towns for this purpose moved, on average, over much greater distances than those who worked as rural farm servants. If this was so then how were they recruited and how did they hear of the opportunities? Personal contacts between the families which they joined and their home areas is the likely answer, probably due to linkages established by previous migrants to the towns, male and female.
Given that service was a temporary status a substantial proportion of the girls who moved to such posts in the larger towns must have returned to their home areas in smaller burghs and the countryside before, or at, marriage. It is unlikely that they all remained in the major urban centres at marriage given the surplus of females in such towns and of males in the countryside. This emphasises another of Ravenstein’s maxims, that every migratory flow has a compensating counter flow.\(^8\) Given the importance of female migration to the towns and its temporary nature in a great many cases it may be suggested that the return flow of women to the countryside after a period in service would have been important not only in bringing money into rural areas but also in spreading urban fashions and values. The spread of new trends such as tea-drinking, which was common in rural areas by the end of the eighteenth century, and the demand for higher-quality manufactured goods may be examples of how new ideas and attitudes which originated in the towns were diffused to rural areas by this two-way flow of young women.

For many young women who worked as domestic and farm servants marriage, the raising of a family, and a bare sufficiency or possibly rather better as the wives of cottars, tenants or artisans awaited them once they had finished their period in service. However, misfortunes such as widowhood, marriage to an improvident partner, or sheer bad luck could easily drive such a woman below the poverty line and, possibly, on to the roads as vagrants. The next section considers the degree to which women contributed to the vagrant population which was a feature of Scottish society throughout the early modern period, and examines some of their characteristics and the events which set them on the move.

**POVERTY AND VAGRANCY**

Many sets of circumstances might reduce women to poverty. Widowhood, spinsterhood, old age, physical or mental infirmity or unexpected pregnancy might push women to the margins of society and over the threshold of poverty. It is harder to determine the factors which forced women to leave their homes and take to the roads. Certainly relief from the parish poor fund would not usually have been enough to maintain them at home without charity from relatives and neighbours. The kirk sessions who administered parish poor funds, provided regular relief infrequently and for only a limited number of people, and expected their handouts to be supplemented by assistance from other sources.\(^8\) Perhaps it was only when these sources failed that women took to begging and became mobile.

Women tend to figure more frequently than men among parish poor lists and probably formed a substantial majority of the poor.\(^8\) In Dirleton parish, East Lothian, for instance, women accounted for up to three-quarters of the people on the regular poor list during the 1670s.\(^8\) Presumably the women who were listed were single or widowed while at least some of the men to whom payments were made would have been married so that the proportion of women supported by the Dirleton poor fund was probably even higher.
There were probably more old women in most rural communities than old men; women in Scottish rural society undertook their share of hard physical labour but they did not have to do the heaviest jobs; accidents or early death due to occupational hazards may have resulted in male life expectancy being significantly lower that that for women. However, the dominance of women over men in the regular poor lists of Lowland rural parishes also suggests that it was easier for men to obtain casual employment to keep them off the poor list and also that such communities tended to make an effort to maintain poor women at home while impoverished men were more likely to turn to vagrancy. Nevertheless, women did figure among the vagrant population. The importance of female vagrancy and some of its characteristics can be determined from the detailed study of payments made by particular kirk sessions.

In Monikie parish, Forfarshire, between 1660 and 1710 27 per cent of the payments made to individual vagrants went to women, the proportion being comparable with that for English vagrants studied by Beier and Slack.\(^{25}\) Eighteen per cent of them were described as crippled, dumb or blind. More surprisingly, 20 per cent had once possessed some social status; they were most commonly described as ‘distressed gentlewomen’ but others were widows of ministers and in one instance a minister’s daughter. Very few were described as travelling with children but this may merely have been because the session clerk did not bother to record this. One or two women were on the road because their homes had been destroyed by fire. The origins of the vagrants were rarely given but one woman at least had originated from Edinburgh and another blind woman from Orkney. The fact that such cases were specified may show that they were unusual but it does indicate that at least some female vagrants travelled over considerable distances.

For Dirleton in East Lothian between 1666 and 1690 a similar picture emerges.\(^{26}\) Women formed a minority, but nevertheless a significant one, among the vagrant population. Female vagrants made up 29 per cent of those whose sex was recorded. Four per cent of them were stated to be travelling with their husbands, 3 per cent with a man who was not their husband and a further 5 per cent with both husbands and children. Twelve per cent of the women were travelling alone with their children; instances of women with up to seven are recorded. These figures are likely to underestimate the proportion of women travelling as part of a family. An unknown number of the men who received payments may have been accompanied by their wives. It does suggest, however, that vagrancy was less a group or family activity than an individual affair. Three out of every four women recorded were travelling alone.

Four per cent of all the women recorded as travelling on their own were described as ‘sick’. 2 per cent blind and 6 per cent as crippled in various ways while 3 per cent were described as being senile or mentally defective. These figures cannot be considered as representing the total proportion of such women among female vagrants as the recording of such details was sporadic and haphazard but it indicates that infirmity of various kinds was an important element in driving women on to the roads, even when mobility itself was
difficult as in the case of the lame woman transported in a barrow who received relief in 1684 and again in 1687.

Surprisingly, only 4 per cent of the payments to women described the recipients as widows but the session clerk may not always have bothered to enter such details. The Dirleton records chronicle the harsh side of vagrancy with expenditure for graves and winding sheets to female beggars found dead in the parish, and for the burial of the children of vagrant women. Eleven per cent of the payments went to women who were described as distressed gentlewomen or the widows of gentlemen and professional men such as ministers. Such women generally received larger payments than ordinary vagrants. This may have been partly because their hard luck stories were not only established by testimonials but, given that testimonials could be forged, by common knowledge and repute. In one or two instances the women were known personally to the minister or elders. One minister’s widow had come from as far as Northumberland and another, a ‘distempered gentlewomen’, was also described as being English. Possibly casual relief was more generous north of the Border. A third of the payments went to women who were specifically travelling with a testificate. Many of these may have been women travelling in search of work and requiring only temporary assistance rather than full-time vagrants.

The Dirleton session seems to have been fair even to women for whose misfortunes they clearly did not have much sympathy. The case of Christian Walker in 1680 is an illustration. While begging in the parish she gave birth to a child whose father, she claimed, lived in Oldhamstocks. On investigation this was found to be false and it was discovered that two or three years previously she had been brought before the session at Cockburnspath for fornication, being imprisoned and subsequently banished from there. The Dirleton session gave her 33 shillings for her maintenance ‘lest the child should perish’.

Levels of vagrancy for both men and women fell over most of the Lowlands during the eighteenth century. The cessation of major subsistence crises, the more adequate provision of poor relief, and greater control over vagrancy at a parish level all combined to achieve this. Vagrancy was not, however, eliminated. The Old Statistical Account indicates that it was still a problem in many areas. Among the regions which stand out in this respect is the South West, where an influx of Irish beggars of both sexes, sometimes moving as families, was reported from many parishes. Sporadic parishes throughout the Lowlands reported that none of their own parishioners begged from door to door but that the community was troubled—‘infested’ was the popular term—by vagrants from other areas. The origins of these vagrants were rarely specified but it is clear that many were from the Highlands. The rise of temporary migration from the Highlands to the Lowlands for agricultural and other work must have contributed to this. Men and women on the move, particularly those on their way south at the start of the summer season, are likely to have begged either from choice or necessity. However, Mitchison’s work on poor relief has shown that payments to paupers in many parishes in the Northern Highlands were minimal and entirely non-existent. Rising
population, limited opportunities for employment, and lack of money to build up parish poor funds led to begging from door to door being widespread and acceptable within the Highlands where the old tradition of hospitality made people, no matter how poorly off themselves, reluctant to deny anyone alms or a night’s lodging.\

Inevitably, given the greater wealth in the south, this vagrancy tended to spill over into adjacent Lowland areas. Many parishes in Angus appear to have been badly affected and there was a natural tendency for the poor to drift towards the larger towns. Patterns of vagrancy should not be oversimplified though. In the parish of Fortingall in Highland Perthshire the minister complained that many of the people begging for, and sometimes extorting, alms came from Lowland towns rather than surrounding rural parishes.

CONCLUSION

This essay has demonstrated something of the scale and diverse nature of female mobility in seventeenth- and eighteenth-century Scotland. It has concentrated on three facets of mobility which were present in Scotland throughout this period. Urban in-migration became increasingly important during the eighteenth century and the significance of the contribution of female migrants has been demonstrated here. The movement of women servants continued to be a major element in mobility within the countryside. As with England, the movement of servants from farm to farm together with change of residence at marriage, were probably two of the most important components of the geographical mobility of women. As the eighteenth century progressed new elements, such as the rise of long-distance movement of servant girls from the Highlands, appeared. Female vagrancy in the seventeenth century has probably been underestimated and it was still a feature of Scotland at the end of the eighteenth century, though it had probably diminished in scale from earlier times.

Space has not permitted a discussion of one specialised aspect of female mobility, migration at marriage. Marriage generally involved a change of residence for a woman and marriage distances have been used as a measure of more general social interaction. Recent work on East Lothian marriage registers has suggested that there was an overall increase in marriage distances in both urban and rural parishes between the seventeenth and the late eighteenth century which may have been linked to increases in the general mobility of the population. Other elements of female mobility which increased during the period under study, especially in the later eighteenth century, were the movement of Highland girls to help with the Lowland harvest, and the growing movement of women from purely agricultural areas into the manufacturing districts, a feature brought out again and again in the Old Statistical Account written in the 1790s.

In seventeenth- and eighteenth-century Scotland women were highly and increasingly mobile within an economy and society which was offering them increasing opportunities for work outside the traditional agricultural and
domestic setting, opportunities which frequently involved movement, whether on a temporary or more permanent basis, within a limited local area or over long distances. This essay has brought out some of the distinctive features of female mobility and emphasised the importance of recognising gender differences within the more general field of migration studies. However, we are still a long way from understanding the social, economic and cultural influences which lay behind many of the patterns of mobility which the sources for this period reveal.
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NOTES


26 Houston, ‘Geographical mobility’.
28 Scottish Record Office (henceforth SRO) OPR 644.
31 Lovett, Whyte and Whyte, ‘Poisson regression’, p 319
32 Wareing, ‘Recruitment of apprentices’.
37 Lovett, Whyte and Whyte, ‘Poisson regression’.
39 The details of these are discussed in Flinn, *Scottish population history*, pp 187–200.
40 Ibid p 241.
41 Lovett, Whyte and Whyte, ‘Poisson regression’.
43 Lovett, Whyte and Whyte, ‘Poisson regression’.
45 Wareing, ‘Recruitment of apprentices’.
47 Grigg, ‘Ravenstein and the “laws of migration”’.
48 SRO OPR, p 597.
49 Kussmaul, *Servants in husbandry*.
50 Devine, *Farm servants*.
51 Houston, ‘Geographical mobility’.
53 SRO E70 series. Manuscript poll tax lists for the Lothians.
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55 M Wood (ed), Extracts from the records of the burgh of Edinburgh, (Edinburgh 1940) vol II pp 27, 40.
56 OSA I 378. II 168. VII 3381. IX 370.
57 Ibid. I 378.
58 Stuart, List of pollable persons.
59 SRO E70/8/7 Heriot. E70/8/17 Stow.
60 Ibid E70/13/5 Dalmeny.
61 Semple, Renfrewshire poll tax returns.
62 Ibid.
63 Ibid.
64 Stuart List of pollable persons. Semple, Renfrewshire poll tax returns. SRO E70/8.
65 Flinn, Scottish population history, pp 194-5.
67 OSA I 495. II 453. III 529.
68 Flinn, Scottish population history, p 279.
69 Houston and Whyte, 'Scottish society in perspective', in Houston and Whyte, Scottish society 1500-1800.
70 R A Houston, 'Women in the economy and society of Scotland 1500-1800', in Houston and Whyte, Scottish society 1500-1800.
71 SRO E70 8.
72 SRO E70 8 17.
74 OSA I 121. II 175. III 536.
75 OSA III 29. 397. 529.
78 Ibid.
81 Grigg, ‘Ravenstein and the “laws of migration”’.
83 Flinn, Scottish population history, p 191.
84 SRO OPR Dirleton.
86 SRO OPR 705.
87 OSA I 175. 198. III 139. 222. 321.
88 OSA III 229. 232. 475.
89 R. Mitchison, 'North and South: The development of the gulf in poor law practice', in Houston and Whyte, *Scottish society 1500–1800*.

90 OSA II 455.

91 OSA II 207.

92 OSA II 455.


94 Whyte, 'Marriage and mobility'.

95 Howatson, 'The Scottish hairst'.

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

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INTRODUCTION:
SCOTTISH SOCIETY
IN PERSPECTIVE

R.A. HOUSTON AND I.D. WHYTE

Scotland before 1750 was a small and rather poor country whose significance for European political, economic and, to a lesser extent, intellectual life was at best peripheral. Her economy and society were transformed in the century after 1750 by agrarian and industrial changes which catapulted Scotland to prominence in world affairs, a standing that the early modern period had barely presaged. Until the advent of a largely urbanised and industrialised society in the nineteenth century, historians have tended to assume that the social structure of Scotland retained archaic forms which had long disappeared from more "developed" countries such as England. Scotland's economy and level of wealth in the pre-industrial period have often seemed closest to those of Scandinavian countries or Ireland. Not only was Scotland peripheral to mainstream European history, but her society was so distinctive as to be of little relevance to an understanding of social organisation and change in a wider context. This introductory chapter sets out to question these preconceptions by analysing Scottish society between the Renaissance and the Industrial Revolution in a European context and, by presenting a brief and accessible outline of social structures and trends, to assess the typicality or distinctiveness of Scotland.

In this task, the social historian is constrained by the comparative lack of academic research on pre-nineteenth-century Scottish society. Some aspects of Scottish social history have always been attractive to the Scots themselves, but the society of Scotland in the past has received remarkably little attention from scholars. While the Scots love their history, their conception of it is generally based on vague, romantic myths about clans and tartans, poets and Pretenders. \(^1\) Partly due to the centralisation of archives in Edinburgh and the lack, until recently, of regional record offices, Scotland has failed to develop a strong tradition of local amateur historical study of the kind which has flourish in England. One result of

\(^1\) B.P. Lenman, "Reinterpreting Scotland's last two centuries of independence" (1982): 217-19. We should like to thank the contributors for their comments on this introduction.
R.A. Houston and I.D. Whyte

this is that the popular image of Scottish society in the past is probably further removed from the scholarly 'reality' than in any other European country. Coupled with this are the preconceptions of academic historians, both within and without Scotland. The Scottish historical 'establishment' has always been small and, until recently, intensely conservative in its approaches, and has tended to concentrate its attention on institutions like the church, or on the high and mighty, ignoring the mass of the population in the past as well as the concerns of social historians in England and Europe.3

For its part, the outside academic community has treated Scotland as a geographically peripheral nation about which little is known and whose relevance to wider European trends is limited. Described by early modern English travellers in a universally hostile manner, and only slightly more charitably by continental commentators, the Scottish people appear in English historiography as nuisances, villains or curiosities. This attitude is partly a reflection of the lack of interest of a south-east English power base for its Celtic periphery, heightened in the case of Scotland by its late incorporation into Britain. Behind the smokescreens of Scotland's distinctive social structure and institutions, which supposedly 'require special treatment', and the oft-repeated claim that the sources for proper social history do not exist, English and European historians have tended to ignore the Scottish dimension.6

Scotland did indeed have certain distinctive institutions. Roman law, extensively adopted in Scotland from the late fifteenth century, placed much greater emphasis on written codes than did English common law which treated custom as a powerful consideration.5 Scotland had a separate monarchy until 1603; her own Parliament until 1707; a vigorously Calvinist church after 1560; an education system funded and constituted in a different way from England; a different currency whose pound was worth about 8 per cent of English sterling during the seventeenth century and

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1 For example see G. Donaldson, Scotland, James V to James VII (1963).
2 Some nineteenth-century scholars and antiquarians did investigate curiosities such as witchcraft and other superstitions: e.g. A. Grant, Essays on the superstitions of the Highlanders (1811). Modern scholars have also produced work of European significance on the subject: e.g. C. Larner, Enemies of God (1981).
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different weights and measures. There were also features of Scottish society which marked it out from that of England: a less prominent middling group in rural society until the later eighteenth century, composed of tacksmen (see below) in the Highlands and tenant farmers in the Lowlands rather than owner-occupiers, more extensive poverty and a lower standard of living, higher levels of emigration, a more obviously martial society, pronounced regional differences in social organisation and language between Highland and Lowland, a demographic regime in which famine featured until well into the eighteenth century. There are, as yet, no clear indications of distinctive farming regions with related patterns of settlement, and society in Scotland in the pre-industrial period in the same way as in Lowland England or France: in terms of its field systems, crops and livestock management Scotland appears to have been more homogeneous than many European countries during early modern times. Despite these contrasts with neighbouring countries, in many respects social structures and social changes in Scotland did not follow unique paths between the Renaissance and the Industrial Revolution when viewed in a wider European context.

POPULATION AND ECONOMY

Scotland was a small country with a small population. Although estimates of population totals before Webster’s census of 1755 are based on little more than educated guesswork, it is probable that from perhaps 500,000 inhabitants in 1500, numbers rose to 7–800,000 in the later sixteenth century, a million in 1700 and 1.6 million at the time of the first official census in 1801. There are signs that growth came fastest in the later sixteenth and early seventeenth centuries, numbers stagnating thereafter until a renewed and sustained period of increase began in the second half of the eighteenth century. The chronology resembles that of England, though the mechanisms probably differed and the Scottish rates of increase never matched the increase of at least 1 per cent per annum of English population at its most buoyant, possibly due in part to higher levels of emigration.

1 S.G.E. Lythe & J. Butt, An economic history of Scotland (1975): 81–4; T.C. Smout, A history of the Scottish people, 1500–1830 (1972) is easily the best introduction to the social history of Scotland though a rapidly growing body of new research is beginning to date some of the interpretations.
4 J. Thirsk, The agrarian history of England and Wales, vol. 5, part 1, 1640–1720 (1985); I.D. Whyte, Agriculture and society in seventeenth-century Scotland (1979): 19–22. The tone of this introduction is often tentative, reflecting the patchy nature of research in certain areas.
Household size was similar to other north-west European countries, at about five persons, and its composition changed very little over the period 1500–1800. Scotland provides no support for an evolutionist view of shifts from large and complex family units to small and simple ones with industrialisation, though it is possible that larger, extended families may have been commoner in the Highlands.\(^{13}\)

Key issues such as trends in nuptiality and fertility remain uncertain because of the patchy survival and poor quality of essential sources such as parish registers of baptisms, marriages and burials, but it is argued that Scotland possessed a ‘high pressure’ demographic regime similar to France or perhaps Ireland, where high birth rates were matched by swingeing mortality, and where crises of subsistence remained a central fact of life until the end of the seventeenth century in the Lowlands and well into the eighteenth century in the Highlands.\(^{14}\)Gibson and Smout imply in chapter 2 that the homeostatic regime which adjusted population and resources in England (through changes in the age of women at first marriage responding to the standard of living) was not matched in Scotland. Population trends were instead dominated by mortality caused by famine and disease to a later date than in England, and the accelerating population growth of the late eighteenth century appears, as it did in Sweden, to have been attributable mainly to improvements in life expectancy. The average life span certainly seems to have been lower in Scotland than in England: 30 years or less rather than 35 during the mid-eighteenth century. This pattern only changed in Scotland, like France, after the middle of the eighteenth century when mortality fell dramatically.\(^{15}\) Reasons for this included inoculation against smallpox, autonomous changes in the virulence of disease, and a decline in famine deaths thanks to more efficient agricultural techniques, the advent of the potato, improved transport, and more effective poor relief. Scotland appears to have resembled England in having a late age at first marriage for women – 23 to 26 on average, though female celibacy was more extensive. Illegitimacy was higher than in France (and in England until c.1750) and levels increased in the late eighteenth century as they did all over Europe. The level of bastardy rose steadily from about 1 per cent in the 1650s to around 5 per cent by 1800. Between 1660 and 1760 the illegitimacy ratio for Scotland as a whole was around 4 per cent. For the Central Lowlands the figure was lower, 2–3 per cent but for the Highlands 3–6 per cent and Caithness 7–9 per cent.\(^{16}\)

There are some suggestions that the Highlands may have been more like


\(^{14}\) Flinn (1977):164–86.


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Ireland in experiencing almost continuous population growth throughout the period, despite the fact that the region was worse hit than the Lowlands by the famines of the 1690s. A growing imbalance between population and resources during the eighteenth century forced many Highlanders into seasonal or permanent migration out of the area and condemned those who remained to live on increasingly marginal landholdings. A similar rise in the volume of temporary and permanent migration can be found in many upland areas of Europe. People whose lives had been disrupted by subsistence crises and, in the second half of the eighteenth century, displaced Highlanders and the victims of agricultural change in the Lowlands moved overseas in large numbers and from the sixteenth century onwards emigration was probably a more significant element in Scottish society than any other country in Europe except Ireland.

Another option was to migrate within Scotland, usually to the Lowlands and often to a town. For population mobility was extensive, as Whyte shows in chapter 1. The royal burgh of Edinburgh, excluding satellites like the Canongate and Leith, grew from a community of 12,000 in 1560 to 20,000–25,000 in 1635, 30,000—50,000 by 1700 and to 82,000 at the time of the 1801 census. Scottish urban growth was, along with England’s, the fastest in Europe during the eighteenth century, most of this growth being fuelled by immigrants from the countryside. Urban growth occurred throughout much of the early modern period, but particularly in the later sixteenth and early seventeenth centuries and again after 1750, the two periods of most rapid growth for the Scottish population as a whole. Recovery from the economic dislocations of the 1640s and 1650s was slow for towns like Dundee, but smaller centres and the great towns of Glasgow and Edinburgh flourished. Although Edinburgh was the largest Scottish town until the late eighteenth century, only then being overtaken by Glasgow, the capital never held such a large proportion of the urban population of Scotland, or indeed of the total population, as London did for England. Major regional centres like Glasgow, Dundee, Aberdeen, Perth and some lower-rank centres like Inverness and Dumfries in less highly urbanised areas were probably of greater relative significance as centres of wealth and trade than the larger provincial towns of England, a situation

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more comparable with France. Unlike England, sixteenth- and seventeenth-century Scotland witnessed the creation of many new burghs, though comparatively few became substantial urban centres.\textsuperscript{23}

Table 1 Percentages of the population of England and Scotland living in towns with 10,000 or more inhabitants, 1500–1800\textsuperscript{24}

<table>
<thead>
<tr>
<th>Year</th>
<th>England</th>
<th>Scotland</th>
</tr>
</thead>
<tbody>
<tr>
<td>1500</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>1600</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>1700</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>1750</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>1800</td>
<td>20</td>
<td>17</td>
</tr>
</tbody>
</table>

Although based on the amalgamation of population estimates of varying quality for individual towns the above table illustrates three important points. First, virtually all the urban growth took place in the Central Lowlands of Scotland which contained approximately half of the nation’s people. The image of Scotland before the later eighteenth century has often been of a country where urbanisation had made limited progress yet the Lowlands at least were quite highly urbanised by the seventeenth century even if many of the towns were small. Urbanisation was highly regionalised since the Highlands had no towns of any size. Second, Scotland’s urban population grew at the same rate as that of England between 1500 and 1600, at a much faster rate after 1700, albeit from low initial levels, and nearly doubled in the second half of the eighteenth century. This rapid increase was unique in contemporary Europe. Paisley, for instance, quadrupled in size between 1755 and 1801.\textsuperscript{25} Third, these figures are a useful indicator of the rapid pace of economic change after 1750. Until the eighteenth century, demand for the services which large towns could offer and the agricultural surplus to feed them were limited. Agricultural productivity was still low in 1700 since the proportion of the population who were net consumers of food (town-dwellers and rural artisans) cannot have exceeded 25 per cent – probably less than French levels and half those obtaining in England.\textsuperscript{26}

Despite her position on the periphery of Europe, Scotland’s overseas trade links generated contacts with most parts of north-western Europe

\textsuperscript{23} G.S. Pryde, The burghs of Scotland (1965); I.H. Adams, The making of urban Scotland (1978): 11–47.

\textsuperscript{24} de Vries (1984): 39. The urban hierarchy of England was more exceptional in a European context than that of Scotland.


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and occasionally with places further afield in the Mediterranean, Russia and, from the later seventeenth century, across the Atlantic. This was true even of the sixteenth century, and brought new ideas and products back to Scotland’s people. Intellectual exchange took place with European universities such as Paris before the Reformation, Heidelberg and Huguenot academies like Saumur after it, and an increasingly special relationship developed with Dutch universities from the 1620s. The legal and medical schools at Leiden were particularly significant between 1675 and 1725, judging from the number of Scots who matriculated.27 Scotland was part of the intellectual mainstream in early modern Europe and during the eighteenth-century Enlightenment became a leader.

Trade with Europe was the jewel in Scotland’s economic crown before the eighteenth century, since the domestic economy laboured under many constraints. These included a shortage of skilled labour, poor transport and communications, lack of ready cash, limited investment in industry, circumscribed domestic markets, poor agricultural techniques and an unfavourable climate. Yet the pattern of overseas trade – exports dominated by unprocessed or partly processed primary products, imports by manufactures, luxuries and some essential raw materials such as timber and, in years of famine, emergency supplies of grain from the Baltic – underlines the poor and undeveloped nature of her economy before the eighteenth century when compared with England (but not with Ireland or Scandinavia).28 Moreover, as Lynch discusses in chapter 3, the distinctive pattern of Scottish overseas trade constrained the development of craft skills and the range of occupational structures in Scottish towns until well into the seventeenth century. Edinburgh had about twenty different craft occupations in the early sixteenth century, roughly a quarter of the number in contemporary Norwich, a town of approximately the same size. In the lower reaches of urban society it was the norm to have more than one occupation.29

Economic change can be summarised as follows. The sixteenth to early seventeenth century was a period of population growth when agriculture changed relatively little, but overseas trade expanded. Inflation was not a serious problem until the later sixteenth century and Scotland was less affected by wars than many continental nations in the early modern period.30 However, these developments were halted in the 1630s, 1640s and 1650s by political and military dislocations from which Scotland’s

economy recovered only slowly in the later seventeenth century. Subsistence agriculture was overwhelmingly practised in the Highlands. The surplus of livestock which was creamed off to supply the cattle trade to the Lowlands and England, which became prominent from the later seventeenth century, was largely extracted by landowners as rent and brought little benefit to the farmers themselves. In the more advanced Lowlands the commercial element in agriculture was greater - Dodgshon has estimated that perhaps a quarter of the farmers in those areas closest to the coast and the major towns were producing wholeheartedly for the market in the later seventeenth and early eighteenth centuries.31 Elsewhere most farmers had some involvement with the market, however modest, and this element was to increase gradually from the seventeenth into the eighteenth century. The 1690s were disastrous for agriculture and the 1700s for some sectors of finance because of the failure of the Darien scheme, but the remainder of the eighteenth century witnessed slow recovery, then accelerating industrial and agricultural productivity coupled with rapid industrialisation, rising real wages and a healthy overseas trade based primarily on Glasgow.32

STRUCTURE AND CHANGE IN SCOTTISH SOCIETY

It is commonly assumed that Scotland's economic backwardness went hand in hand with, or was indeed partly caused by, primitive social structures such as the Highland clans. There are few contemporary analyses of the nature of Scottish society of the sort which have proved so helpful to historians of early modern England.33 Scottish sermons are almost invariably dry and theological, with few remarks about obedience, deference and order of the kind found so frequently in England, though the Scottish clergy were not averse to making political judgements from the pulpit.34 The clergy talked about man and God but not about man and man. Formal tables of ranks of the kind which existed in seventeenth-century France or eighteenth-century Prussia were unknown in Scotland.35 Descriptions tended to focus on political or legal standing and generally do

not go beyond the simplest classification. Bishop Leslie split the society into churchmen, noblemen and commons (by which he meant burgesses): a conception of 'Estates' which had little importance for everyday life.36 Adam Smith remarked on social structure, differentiation and change in his Wealth of Nations (1776) as did John Millar in The origin of the distinction of ranks (1771), both writers reflecting the Enlightenment's drive to develop general theories of the development of societies. More particular was Peter Williamson's Edinburgh directory of 1773-4 listing citizens in order of rank starting with Court of Session judges, advocates, writers to the signet and so on.

Social gradations were more subtle, stratification more complex in practice. At the parish level, one kirk session saw its parishioners ranked between 'masters, free holders, feuers, proprietors and servitors of the ground'.37 Urban elites were anxious to maintain the distinction between those with burgess privileges and the rest, though this was in decline in the late seventeenth century.38 We must therefore study the distribution of wealth, status and occupations in Scottish society, and analyse the relations of power and authority between the different groups. Using tax documents, inventories and estate records, we can establish a ranking of occupations by wealth in both urban and rural society, and can emphasise both the unequal distribution of wealth between elites and the rest of the population and also the gradations within groups such as tenant farmers which, by the later seventeenth century, had become increasingly visible in differences in housing and material possessions.39 Taxation schedules reveal the extent to which wealth was polarised in the Lowlands during the 1690s. Assuming that the number of hearths in a house is an approximate indicator of the wealth and social standing of the family living in it, we can see that in West Lothian 69 per cent of all those who paid the hearth tax (the exempt poor must have lived in single hearth dwellings) did so on one hearth only, 14 per cent on two hearths and only 10 per cent on four or more. For Dumfries-shire the figures are 63 per cent, 21 per cent and 7 per cent respectively. This profile is more reminiscent of eighteenth-century Ireland than Lowland arable England.40 Scottish society was, nevertheless, differentiated by wealth and status at an early date.

Access to land determined the wealth and well-being of the vast majority of Scotland's people, as it did throughout early modern Europe. Great
proprietors dominated land ownership, their economic power protected and reinforced by their hold on political life, the judicial system and social values. In this respect Scotland resembled Denmark, where farmers and labourers were exploited by the great lords and where in 1789 1 per cent of the population owned 56 per cent of the national wealth, or Norway where a substantial independent peasantry did not exist. There was no active land market among the peasantry despite the existence of feuing and wadsetting (see below), and an acceleration of buying and selling of heritable property in the later eighteenth century, principally by the merchants and professionals of the larger towns. The dominance of the great nobles remained. Crown, burghs and owner-occupiers held a small proportion of the land in Scotland, the only regions with any substantial numbers of peasant proprietors being the west-central Lowlands and the south west. The Western Isles represent one of the most extreme examples of the general pattern, land being held in large blocks and changes of ownership by sale (as opposed to inheritance) rare. In between were areas like East Lothian and Fife where average estate size was smaller and the land market comparatively more developed.

Scotland had no real equivalent of the celebrated English yeoman freeholder, except perhaps a handful of small lairds and portioners (heirs to part of a heritable estate) numbering perhaps 8,000 in the later seventeenth century. English copyholders were paralleled in sixteenth-century Scotland by a few ‘kindly tenants’ and by the only slightly more numerous ‘rentallers’, but most of these tenures were converted to ordinary leasehold in the late sixteenth and early seventeenth centuries. Small owner-occupiers holding land by heritable ‘feu ferme’ tenure became more numerous from the middle of the sixteenth century with the break up of ecclesiastical estates in the years before and immediately following the Reformation of 1560 (see below) but their importance in rural society was purely local and many of them were bought out by larger lairds during the seventeenth century. An observer summarised this distinctive feature of Scottish society compared with England when he wrote, probably in the 1580s, of the ‘defect in proportion among the commonalty, viz. that there

14 Timperley (1980): 144. 
16 R.M. Mitchison, From lordship to patronage (1983): 80. In his contribution to this volume Wrightson notes that certain areas of England also lacked this substantial, independent middling group. 
are so few of the middle rank of subjects among them that are able to live competently and honestly of their own and by that means are as a band to tie together the two extremes' of society, 'viz. the higher sort and the rascality'.

In addition to the medieval feudal tenures an individual could hold land by one or all of the following: tack (lease), feu (heritable) or wadset (redeemable mortgage). For most Scottish peasants, access to the land was by leasehold; in seventeenth-century Shetland only 1 will in 20 mentions feu duty payment (indicating proprietorship), but 76 per cent had land rent owing. The short leases which prevailed in the later sixteenth and seventeenth centuries, smallholdings, inefficient agricultural methods and high rent levels weakened any incentive which tenants might have had to invest labour or capital in improvements, although paternalistic attitudes by proprietors usually ensured security of tenure in practice from one generation to another provided that the tenants were suitably productive and deferential. The Hally family held the same farms at Tullibardine on the Atholl estates throughout the years 1688–1783 and average lease duration rose from 9 or 11 years in 1725 to 15 or 19 in 1760. Longer, written leases became generally more frequent in the second half of the seventeenth century and indicated the development of more commercial attitudes in landlord-tenant relations but these were not a complete novelty. Long leases and substantial security of tenure had also been more common in the fifteenth and early sixteenth centuries when tenants were in short supply.

Rural society was headed by the landowners. Next came the tenant farmers who worked the land through their own labour, that of their families and by employing cottars and servants. Tenant farmers were far from being a homogeneous group although the gradations within tenant society are far from clear. The sizes of the holdings which they worked, their wealth and their influence in local affairs probably varied considerably within and between communities. In upland Aberdeenshire tenants accounted for 50 per cent or more of the male pollable population of some parishes in the poll tax returns of the 1690s while in the Lothians they might account for less than 20 per cent. In the upper reaches of the Aberdeenshire Dee and Don, where many farms were divided between 8 or more small tenants, tenant society was comparatively undifferentiated and

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there was probably little distinction between tenant and cottar. In the Lothians, by contrast, there was a marked difference between the larger tenants and the cottars. In such areas the distinction between the wealthy capitalist farmer and his labourers that was so characteristic of the nineteenth century was already beginning to emerge in the seventeenth.56

An important difference between the rural societies of Scotland and England lay in the comparative lack of landless people in the former. As in Ireland, many people in Scotland had access to at least some land, though the size of their plots was often tiny. Cottar families formed the bulk of the rural population in many Lowland parishes and a high proportion of farm servants were probably also drawn from this group. However, cottars, and indeed many tenants, were very definitely land-poor.57 In essence, cottars rented small plots of land from tenant farmers in exchange for their labour and that of their families if they were married. They were effectively farm labourers, removable at will.58 Again, there were regional variations in the extent of this social group. In Renfrewshire, cottars and sub-tenants were less numerous than in Midlothian or Lowland Aberdeenshire because small, tenanted holdings were more available and more people could achieve the status of tenant.59 Subletting was more frequent in Scotland and Ireland than in England, and its distribution around Scotland was determined by population pressure and by the need of landlords for certain types of labour: during the fifteenth century some monastic estates created whole cottar communities to fulfil these requirements.60

Cottars lived close to the margins of subsistence on very small plots of land. In the Highlands in the later eighteenth century there was a great increase in the number of people with very small holdings, tied to the development of kelp burning, fishing and illicit whisky distilling. This development is particularly noticeable in the Western Isles after c.1770: Hebridean cottars were called 'scallags'.61 In the Lowlands many cottars took up industrial by-employments to supplement their incomes. This was so common in the Lothians that the poll tax schedules of the 1690s pick out for special mention those cottars without a craft employment. In south-east Scotland weavers, smiths and wrights usually worked to meet local demand but in rural Angus the putting-out system of yarn and cloth production for regional and national markets was more extensive.62 The economically marginal position of the cottars as a group is highlighted by

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the frequency with which they appear in poor relief records. A list of household heads exists for the parish of Dairsie in Fife (1747). This gives occupations and can be compared with accounts of the sums disbursed to the poor by the kirk session, which administered relief. All those in receipt of relief were cottars: men, women and children afflicted by poverty and chronic seasonal unemployment. In subsistence crises, such as the Highland famine of 1782-3, mortality and migration were greatest among this group.

The urban poor were a more diverse occupational group, comprising servants, casual labourers, journeymen artisans, beggars, vagrants and orphans in some numbers alongside the core of widows and the infirm. Three-quarters of all those receiving relief in Aberdeen 1695-1705 were women of whom two-thirds were widows. Poor relief was more abundant in towns than in rural areas, especially in Edinburgh which attracted large numbers of starving countryfolk in periods such as the later sixteenth century and the 1690s. Edinburgh between 1570 and 1620 was the London of the north, albeit a tenth of the size. In years of bad harvest, the poverty net could catch even tenants, artisans and burgess families. A church survey of Perth in 1584 revealed that a quarter of the town’s population of about 4,500 were poor. During the 1690s, when adverse climatic conditions produced a string of disastrous harvests, a contemporary claimed that a fifth of Scotland’s million inhabitants were reduced to the status of vagrants. This is almost certainly an exaggeration, but Scotland was a much poorer country than England and vagrancy remained a serious problem into the nineteenth century, long after it had ceased to be so in England.

The foregoing discussion relates primarily to Lowland Scotland. One distinctive feature of Scottish society compared with that of England was the pronounced regional variation similar to that of France, Spain or Italy: remarkable in so small a country. Galloway had strongly particularist tendencies, even in the later seventeenth century, but the principal divide was between the Highlands and Islands on the one hand and the Lowlands on the other. While a great deal of ink has been spilled on the subject of Highland clans, the origins, development and social functioning of the clans is still poorly understood. Some writers have suggested that the clan

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64 Flinn (1977): 170.
system had an early origin and remained static thereafter, becoming increasingly anachronistic by the seventeenth and early eighteenth centuries so that a clash with the increasingly commercialised world of the Lowlands and England was inevitable. Others have claimed that clan society was more flexible and responsive to change so that social conditions in the Highlands had changed substantially by the early eighteenth century from late medieval times. These themes are taken up by Dodgshon in chapter 6. Highland society was less markedly stratified than Lowland in terms of wealth, at least below the level of tacksmen and chiefs, and its organisation was more militarised. A tackman held land directly from a chief, acting as military middleman and farmer of rents from his area; he was the social and economic delegate of the landowner who mediated relations between lord and peasant. After the Reformation the Calvinist church was slow to penetrate the Highlands, and Catholicism (or, more precisely, a syncretic form of Christianity) survived extensively there. While Catholicism was proscribed by central government and the Calvinist church, the Highlanders were not politically disadvantaged in the same way as Irish Catholics, and social divisions between lord and peasant were not hardened by religious differences as happened in Ireland.

Social differences were, however, reinforced by linguistic separation. The Northern Isles had a Norse legal system and traces of the language (Norn or Danska) until the seventeenth century. Especially obvious was the Gaelic/Scots-English split, marking cultural, educational, linguistic, religious and social differences. Scotland had been a Gaelic-speaking nation in the early Middle Ages, but by the start of the sixteenth century this tongue was confined to the Highlands and parts of the south west. The rest of the population spoke Scots, originally a distinct language in the view of some but in early modern times increasingly converging with English. A social dimension was added to the linguistic divide as the Highland gentry and aristocracy came during the eighteenth century increasingly to favour the culture and tongue of the Lowlands to that of their Gaelic roots.

The decay of Gaelic was also partly due to temporary migration to and economic contacts with the towns of the Lowlands. Indeed towns were an increasingly important influence on economy and society over the early modern period. In the early sixteenth century even the major burghs were still comparatively small and the medieval concept of a town as a free and democratic community of burgesses was not entirely inappropriate. Elec-

tions to burgh offices were still being held by open ballot of all the burgesses in some burghs. Urban society was differentiated by variations in wealth and status, the most notable gulf being that between the ‘free’ burgesses and the ‘unfree’ inhabitants. By the later sixteenth century, when source material becomes more abundant, it is clear that urban society contained many gradations of wealth and status. A tax schedule for Edinburgh in 1565 shows that the wealth of merchants varied from less than £20 Scots to £29,000 Scots with a quarter of the merchant community (about 100 men) paying 70 per cent of the assessment of that occupational group. Average wealth was much lower than for contemporary English merchants. Wealth was unequally distributed among craftsmen too. Of 496 on an Edinburgh tax list of 1583, half paid a sixth of the total assessment while the top 15 per cent paid 56 per cent.

During the sixteenth and early seventeenth centuries the nature of burgh society changed markedly under the impact of a variety of influences. Among the most important of these were the rapid rise of urban populations (especially in the larger burghs), the effects of inflation, the growing interference of central government in urban politics and a rapidly increasing burden of taxation. Many burghs had close ties with their immediate localities and it was not uncommon for nobility and gentry to exercise considerable influence, sometimes benign, sometimes despotic, in the affairs of their local burghs. The doubling of the populations of many burghs in the later sixteenth and early seventeenth centuries led to a more marked division within the ranks of the burgesses. As had occurred in late medieval England, town government became more elitist and oligarchical in character. In the past, tensions within the burgess community have been presented in terms of conflict between the merchant and craft guilds, the latter struggling to gain a foothold on burgh councils which were dominated by the former. Recent research has, however, shown that the real split which was opening up was not between merchants and craftsmen but between a rising elite of merchant and craftsmen entrepreneurs who were increasingly differentiated in wealth, status and power from the ordinary merchant burgess and master craftsman.

Change in Scottish urban society from an essentially medieval structure towards something more recognisably modern has usually been ascribed to the period from the later seventeenth century onwards. Certainly the removal of the restrictive trading monopolies of the royal burghs in 1672 must have had some impact on the towns but these had already been in decay for some time. More important was the rapid erosion of burghs controls, the beginnings of the development of the Atlantic economy, the

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75 Ibid., 16.
76 Ibid., 35-6.
78 Lynch (forthcoming).
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proliferation of new market centres indicating an expansion of internal trading, and the introduction of new credit structures like bills of exchange. Nevertheless, many of the social and economic changes which have been identified in the later seventeenth century appear to be ones of degree rather than kind, as Lynch discusses in chapter 3. More recent research has shown that Scottish urban society was characterised by greater change during the sixteenth and early seventeenth centuries than has been previously appreciated. While the structure of merchant and craft guilds continued to dominate urban life these became more flexible in terms of whom they admitted and in their operation. The later seventeenth century did witness some changes in burgh society. The development of a variety of manufactories including textiles, paper, glass, and soap production probably increased the proportion of urban workers who were not burgesses and who operated outside the traditional guild framework and also at times outside the town walls. However, as with many areas of Scottish social history, generalisations must remain tentative because of the patchy nature of research.

Important social changes took place during this period in rural as well as urban society, the cumulative effect of which was to accentuate the existing polarisation of wealth and status. Two principal developments account for these changes. The first took place mainly in the sixteenth century and arose from a large-scale transfer of church lands to the laity. Carried out through the medium of 'feuing', the granting of land in perpetuity in exchange for a cash sum and a yearly payment of feu-duty, this transfer worked partly to the benefit of sitting tenants, about a third of whom were able to buy their land and thus become independent freeholders with security of tenure. Their feu duties, initially quite high, were fixed and their value fell rapidly with the sixteenth-century inflation of prices. However, for every sitting tenant who was able to buy his holding, there was at least another whose land was sold out from under them to the nobility of lairds. There was continuity in landholding but also dispossession. Feuing was not the only social change in the sixteenth century. Customary tenures of a kind similar to English copyhold were also being eroded as landlords tried to keep up with price inflation by converting such tenures to ordinary leasehold and increasing rents as often as possible. Associated with this development was the general rise in population during the sixteenth century, a European phenomenon, which meant that there was growing pressure on the available land. Subsistence crises in the 1590s and 1620s drove people off the land for good in areas such as Aber-

81 For example, see T. Donnelly, 'The economic activities of the Aberdeen merchant guild, 1750-99' (1981).
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deenshire. Of course, not everyone suffered. Feuars tied in to fixed and low rents were able to benefit from price inflation and even in Aberdeen there was probably an overall increase in the number of landowners until the 1630s.

Developments during the sixteenth century were fundamental in shaping social structure and social relations during the following two centuries, notably by strengthening even further the economic and social power of the landowners. The most fundamental gulf in early modern Scottish society was the one separating those who worked the land from those who owned it. In England a family could, with hard work and good fortune, rise from the ranks of the husbandmen through the yeomanry to achieve gentry status over a couple of generations. In Scotland this was probably always more difficult and is likely to have become harder still over time. Proprietors might borrow money from their wealthier tenants but their hold on the land market ensured that land was rarely disposed of in small enough parcels to give such tenants an entry to proprietorship.

Scottish society had been more fluid and open during the fourteenth and fifteenth centuries than in the seventeenth and eighteenth centuries and social distinctions between the gentry and the rest of society less marked thanks to the existence of a core of substantial peasants. By contrast with the sixteenth century, the seventeenth saw change operating at a lower level in society in many areas as holding amalgamation by proprietors began to create a more prosperous and commercially oriented group of tenants who were slowly beginning to accumulate capital. This group became increasingly differentiated from the growing proportion of the population made up by the cottars and the poor. In some parts of Scotland, landownership became increasingly difficult even for lairds and prosperous bourgeois. In 1667 there were 621 landed proprietors in Aberdeenshire but by 1771 the buying up of small estates had reduced this to just 250. Only in the Highlands did the seventeenth century see an increase in small proprietors and there was certainly a growth in bourgeois landownership around Glasgow after c.1740 and around Aberdeen and Edinburgh in the second half of the eighteenth century. The trend in the Highlands was reversed in the second half of the eighteenth century as

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rising land values and falling interest rates made it attractive and possible to redeem mortgages. 92

Social mobility for the bulk of the population was checked by the problems of a limited land market and polarisation of landholdings over time. At the top of the hierarchy, social mobility from the burgeoning professional and commercial classes into the landowning class proper was probably rarer than in England except through intermarriage or the acquisition of estates through mortgage defaults. However, the professions were a major refuge for younger sons of landed families. Between 1707 and 1751 fully 96 per cent of entrants to the Faculty of Advocates of Edinburgh came from landed backgrounds but only a third of boys apprenticed to Edinburgh merchants, reminiscent of Stone’s argument that the English gentry and professions saw themselves as equal but trade was somehow beneath most of them. 93

The second major development in rural society began at the end of the seventeenth century and became increasingly important in the eighteenth. This was the decrease in number and increase in size of farm holdings. Commercialisation of farming and urban growth encouraged the spread of new crops and rotations, enclosure and improved agricultural techniques. 94 In the Lammermuirs, a mainly pastoral area in southern Scotland, there were about 1,000 farms during the seventeenth century but only 840 in 1800 and 720 in 1850. Some upland farms were abandoned but most were rationalised into larger holdings. 95 This trend characterised much of Lowland Scotland, even if change was slower to occur in areas such as Aberdeenshire. 96 Not only were the number of tenancies reduced, but also many smaller farms or ‘bonnet-lairds’ sold out to the great estates which proved more resilient to the economic fluctuations of the later seventeenth and early eighteenth centuries. 97 This is the closest Scottish society came to the contemporary ‘decline of the English yeoman’. Because peasant proprietorship had never been important in Scotland it did not decline in the same way as it did across much of Europe after c.1650. 98

Changes also took place below the tenant class. Sub-tenancy was being phased out on some estates in the first half of the eighteenth century, but declined most rapidly between 1770 and 1815. A buoyant agricultural labour market meant that these developments did not necessarily cause unemployment or depopulation, something the apologists of ‘Improve-

92 Bamsted 1982:64.
94 Whyte (1979):113-33, 192-218.
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ment' were keen to stress. There were jobs for farm labourers and
industrial expansion created niches for displaced cotters in the hand-loom
weaving of woollen, linen and, by the end of the eighteenth century, cotton
textiles. But agricultural change did alter the social structure by widen-
ing the gulf between farmers and their labourers since it became increas-
ingly difficult for a man from a cottar background to work his way up to the
tenancy of a large farm, though mobility in both directions between the
ranks of the cotters and the smaller tenants remained frequent. In some
regions, notably the north east, reclamation of waste land created a class of
crofters which formed an intermediate stratum in rural society. The
trend was accelerated by the population increase of the later eighteenth
century which took place, as in England and Norway, mostly among the
lower classes. Important though they were, these social changes took
place only slowly. There was no equivalent of the nineteenth-century
Highland clearances, except perhaps on a small scale in the south west
where in the early eighteenth century shifts to a commercial land exploita-
tion policy (cattle raising rather than the traditional mixed agriculture) by
new owners made change more rapid and painful than elsewhere in the
Lowlands.

Before the eighteenth century, social change in the Highlands was
gradual although the impact of commercialisation was starting to be felt
with the development of the cattle trade and the beginning of estate
reorganisation along more efficient lines; in Argyllshire for example. When
more rapid change did come it was much more painful than in the
Lowlands. To finance their participation in Lowland culture, Highland
landowners had to espouse alien, commercial values which broke the
traditional bonds of society. Always polarised in terms of wealth,
Highland society became culturally differentiated. The gulf between
Highland and Lowland society had grown over time as the Lowlands
became more urbanised, anglicised, law-abiding, Protestant and commer-
cially oriented. From the end of the sixteenth century both church and
state mounted a campaign to reduce the independence of the Highlands, to
suppress Catholicism there, and to curb the perceived threat to order and
stability which the region presented. After 1750 the north-west Highlands

3 M. Gray, ’North-east agriculture and the labour force, 1790-1875’ (1976): 87-93.
4 D. Levine, Family formation in an age of nascent capitalism (1977): 38-87, 146-32; Dyrvik
(1979b): 68.
6 E. Cregeen, ’Tradition and change in the West Highlands of Scotland’ (1979): 113.
8 Smout (1972): 39-16.
and Islands of Scotland came more closely to resemble Ireland than the adjacent Lowlands.

Change in urban society took place more steadily over the period. Stratification by wealth increased through time and towns began to fill up from below. Poverty was a serious and chronic problem for major burghs from the later sixteenth century onwards. Apprentices who had served their time found it increasingly difficult to set up as independent masters and had to remain as journeymen. A small nucleus of masters came to exist alongside a growing number of journeymen, hardening the division between employer and employee. As in many rural areas, social mobility became harder during the eighteenth century.\(^\text{106}\) The beneficiaries of urban growth were the merchants, specialist craftsmen and, above all, the professional classes: lawyers, doctors, clergy and teachers. Edinburgh lawyers and writers were developing as a wealthy, powerful and self-conscious group during the reign of James VI, proliferating after the Restoration and again after the Union of 1707. Their wealth and status among the 'quasi-gentry' were consolidated after the middle of the century by the development of distinctive suburban residential areas of which Edinburgh's New Town and the early extension of Glasgow west of the medieval High Street are the best known.\(^\text{107}\) Most obvious in the large centres such as Edinburgh, Glasgow, Aberdeen and Dundee, urban growth produced increasing occupational specialisation even in smaller centres. This was already well developed in the textile and shoemaking towns of the west-central Lowlands: Kilmarnock and Paisley for example, and the labour force became increasingly proletarianised in the course of the eighteenth century. Poverty, disease, low educational standards and crime became increasingly prevalent in the mushrooming towns.\(^\text{108}\) As towns grew from the sixteenth century onwards, their administration became more oligarchic, dominated by a wealthy elite. The traditional concept of an urban 'community' which had been easily sustained in compact towns of a few thousand people was all but lost in the rapidly growing urban centres of the eighteenth century.\(^\text{109}\) Even in the sixteenth century it was under threat. Civic ceremony only appeared in its mature form in the late fifteenth and early sixteenth centuries as a way of coping with increasing social differentiation but it died out towards the end of the sixteenth century.\(^\text{110}\)

\(^{106}\) Smout (1972: 339); Durie (1979: 78-9). R.A. Houston's own research on Edinburgh between 1660 and 1760 confirms this: e.g. the 1734 wages dispute between journeymen tailors and their masters. SRO CS239/E/1/15.

\(^{107}\) A.J. Youngson, The making of classical Edinburgh (1966); A. Gibb, Glasgow, the making of a city (1982).


\(^{110}\) We are grateful to Michael Lynch for this information.
SOCIAL RELATIONSHIPS

Describing social structures and change is comparatively straightforward but analysing the quality of social relationships is less so. The basis of society was created by the family and by kinship links. Research on the family in Scotland is still in its infancy although it is usual to assume that there was strong patriarchal control: husband, father and master lorded it over wife, children and servants, the male position consolidated by the law and by the prevailing assumptions of the society. Children were regarded by writers of the time as morally vulnerable and in need of discipline but there is no evidence of particularly hard attitudes towards them nor of any major shift in the conception of childhood as a phase of life.111

Women were closely involved in many areas of economic life but occupied a largely subordinate role in society as Houston shows in chapter 4. Kin use and recognition were far from extensive even in the sixteenth century, and the importance of kin beyond the nuclear family was on the wane even among the upper classes over the period. Scots kinship was agnatic in contrast with the cognatic system in England. Descent being counted from a male ancestor and kin bonds generally reckoned between males, identification being helped by the use of a kin ‘name’. Women were added to, or subtracted from, male kin groups.112 In the Lowlands at least, kinship was as unimportant as an organising principle for economic, social and cultural relationships as it was in sixteenth- and seventeenth-century England, though until well into the seventeenth century the law continued to stress the central importance of an injured party in any criminal case, including living relatives in the case of murder.113

Recent work on English society has argued that the nature of social organisation and personal relationships was distinguished from all other early modern peoples by a fundamental ‘individualism’.114 Property was owned by individuals rather than groups, kinship was unimportant as an organising principle in economic and social relations, and aspirations for personal advancement were identifiable ‘modern’. Because of the organisation of some Scottish agricultural tenures, it has sometimes been assumed that farming was a communal affair with shared responsibilities and the division of gains and losses. Farms could be rented to more than one tenant in two ways. Joint tenancy arrangements granted the land to a group of people under one lease for a single payment. This system was

already uncommon by the early seventeenth century. Multiple tenancy meant that a person rented a specific share of a farm for his sole use. In neither case was co-operation beyond herding, stocking and possibly ploughing any more extensive than in the common fields of England. At the same time, single-tenancy units formed a growing proportion of farms, and it is likely that economic individualism was the prevailing ethos even on those in multiple tenancy. Even where a farm was held in joint or multiple tenancy, shares of land were not necessarily equal.

Historians conventionally speak of the close personal structure of past Scottish society. Institutions and relationships from military recruitment in the Highlands to the legal system codified during the sixteenth and seventeenth centuries were very personal and family-oriented in concept. Some have gone so far as to argue that the mutual dependence of different groups in society established a social consensus, and that equality of opportunity in education from the seventeenth century helped to create a level of social harmony and an absence of class distinctions unparalleled elsewhere in early modern Europe. Direct evidence of harmony and co-operation are difficult to come by in documents which, with the possible exception of baron court books, tend to focus on friction. Certainly, by the fifteenth century serfdom had disappeared from Scotland, and from then on, in the Lowlands at least, with the exception of coal and salt workers who were personally bound to the owner of the land they worked on until 1799, relationships between superior and inferior were mainly on a contractual, economic basis. Some feudal structures did survive, notably carriage and labour services levied on tenant farmers, the obligation to grind corn at the lord’s mill (thirlage) and even military service in some areas, but feudal relationships were much weaker than in seventeenth- and eighteenth-century Burgundy, Italy or eastern Europe. After the Restoration, the power of the lords over the peasantry began to fade as direct social, legal, cultural and economic contacts came increasingly to be mediated by the state and by middlemen. This was most obvious in the Highlands but even there blind loyalty to the clan chief was not (and had never been) universal.

Rural life was not wholly dominated by the landlords. The middling
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ranks played an intermediary role in economic regulation and social control which in some cases mediated the power of the lairds and in others supplemented it. The most important local institution was the kirk session, the agent of the Protestant Reformation in the localities. Headed by the parish minister, this body comprised the church precentor, who acted as clerk, and twelve or so elders and deacons. These were godly laymen drawn principally from the tenants, craftsmen and tradesmen of the parish. Take the case of the parish of Stow in the uplands south-east of Edinburgh. Between 1626 and 1652 a quarter of appointments to the kirk session were heritable proprietors, a tenth comprised millers and craftsmen, and the remainder were tenant farmers. In the urban parish of the Canongate (1630–52), three-quarters were master craftsmen. Members of the kirk session were charged with detecting and reporting offences against the moral and religious precepts of the church – mostly sexual misdemeanours, drunkenness, blasphemy, verbal abuse and breaches of the sabbath – and with the administration of poor relief within their own section of the parish. At a secular level there were ‘birlay courts’ made up of local tenants who acted like English petty constables and manorial officials in ensuring good neighbourhood, cropping and stock control. All these posts were, to a varying degree, held in rotation, and as a result perhaps one adult male in every four or five would have had experience of some form of office-holding, however humble, during his life. In the towns, which had more administrative layers, the proportion was probably higher. The city of Aberdeen recruited 466 separate individuals as constables between 1657 and 1700 from a population of at most 10,000 people. Among the middling ranks of urban and rural society a majority of adult males would have served in secular or ecclesiastical office.

Of course, this is not to say that there was no awareness of social distinctions. Consciousness of rank was manifest in all circumstances. Witnesses to a baptism were usually drawn from the same social and geographical group as the parents. At the other end of life, James Johnston, cooper in Liberton, who died in 1727, made no mention of his soul in his will, but specified ‘my body to be decently interred in Liberton church yard according to my rank and degree’. Deponents before civil and criminal courts often drew the distinction between a man with the dress and demeanour of a ‘gentleman’ and others, a division fixed in print in the introduction to Forbes’ almanac of 1685 which distinguished its readers –

121 Kirk sessions were approximately the same as English select vestry cum church courts.
123 G. Desbrisay, ‘Menacing their persons and exacing on their purses’. the Aberdeen justice court. 1637-1700’ (1986): 75-7.
124 SRO CC8/8/91.
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"noblemen, gentlemen, merchants and others" – from the 'Vulgar'.

Indeed, as early as the fifteenth century, Wormald speaks of an 'obsession with status' expressed in repeated sumptuary legislation.

In terms of social relationships, judgements about the common people of Scotland were often pessimistic. One commentator, James Harrington, believed they were 'little better than the cattle of the nobility'.

Indeed, some landowners had a far from fatherly attitude to their subordinates, and apparently friendly relationships in the lord's court were belied by private remarks. A seventeenth-century Earl of Strathmore condemned his tenants at Castle Lyon for being 'a race of evill doers, desolate fellowes and mislabourers of the ground'. Opportunities to misuse the tenantry were numerous because of the power of the lords: they controlled the land market, borrowed money from their tenants, extracted a high level of surplus in rents and grassums (occasional payments), rack-rented by allowing tenants to bid for holdings, and made evictions with ease.

Despite similarities of wealth between well-off tenants and some lesser lairds there is little evidence of socialising between them suggesting that the status and self-perception of the groups were different. There are many small but telling examples of the pervasive role of social structure in influencing day to day life. Well-off burgesses convicted of an offence at Aberdeen's Justice Court in the second half of the seventeenth century paid heavier fines than their social inferiors but were never subjected to the pain and humiliation of corporal punishment which was meted out to the young, females and the poor.

Relentless social relationships were increasingly apparent in the Highlands and Islands during the eighteenth century because of the contrast with the earlier organic, reciprocal nature of social relations, but comments are numerous about the limited altruism of sixteenth-century Lowland lords when faced with the erosion of their incomes by inflation. The short leases which most tenants held in the sixteenth century made it easy to pass on to them the burden of inflation, and, as in southern Spain or parts of France and Italy, landlords were able to extract a high proportion of the available surplus, a feature of Scottish society which reinforced poverty among the lower ranks and which helped to perpetuate the gulf between landowner and tenant.

Relations between tenants and lords were not exclusively those of exploitation and oppression of the former by the latter. It is likely that in the later sixteenth and early seventeenth century population pressure and

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132 Desbrisay (1986):86.
133 Whyte & Whyte (1988):76.

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inflation soured relations but that when tenants were in short supply and rents hard to collect, as in the later seventeenth and early eighteenth centuries, paternalism's kinder face was shown. Landlords were, for example, prepared to grant remissions from rent to hard-pressed tenants in bad years such as the 1690s and they were the main providers of poor relief to their dependents throughout our period. Gaelic poetry from the Atholl estates 1760–90 almost always portrays the Duke and his factors in a good light.134 The memoirs of an eighteenth-century footman, John Mac- Donald, refer to the upper classes in a favourable way, mentioning acts of generosity, the local reputation of a laird, an owner's great wealth, in a way which shows implicit acceptance of aristocratic values. He concludes humbly: 'Gentlemen know the world better than we'.135 There was probably widespread acceptance of the ideology of domination and its everyday economic and social manifestations but the popular image of a closely-knit society based on mutual respect and need is a serious distortion of reality.

Access to the land and the social relationships it created in rural areas had fundamental implications for relations of power and authority. Scottish rural society was marked by a comparative absence of popular unrest.136 There were sporadic outbursts of protest such as the 'great convocations made in the realm to resist the lords of the ground' in 1457 or the Levellers of south-west Scotland in the 1720s, a body of tenants and cottars opposed to enclosure for cattle farming, but in general rural riot was very rare. Urban populations were more vocal about grain shortages (such as in the burghs of south Fife in 1720), political and religious changes (anti-Protestant riots at Glasgow in the later sixteenth century, anti-Catholic at Edinburgh in the 1670s) or taxation, and there was an appreciable rise in the level of unrest towards the end of the eighteenth century with meal riots, militia riots and anti-clearance disturbances affecting both town and countryside.137 Even so, the level of disturbance was much lower than in most European countries: there is no Scottish equivalent of the 'peasant luries' of seventeenth-century France, nor of the grain and enclosure riots of sixteenth- and early seventeenth-century England. Popular protest was sporadic, spontaneous, ephemeral and was not a regular means by which Scotland's rural population expressed its views and orchestrated its relations with authority. Sixteenth-century urban craftsmen tended to take to the courts rather than the streets for redress of grievances.138

118 Lynch (forthcoming). Plays and ballads as well as acts of arson could be used to attack class injustice and unpopular individuals, though this was probably less common than in
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Absence of protest cannot be attributed wholly to coercion by military force – powers of repression were less than in Ireland – though this was used against the Levellers in 1724, in suppression of the Jacobites and the control of the various types of late eighteenth-century riot. Central government played comparatively little part in the lives of ordinary people during the sixteenth and seventeenth centuries, fiscally, legally or administratively. Regular royal taxation was a sixteenth-century development and any form of taxation was feared and resented. In the localities, the power of landlords was buttressed by a network of courts which could deal with most civil and criminal cases. Courts of barony and regality, among others, meant that pre-eighteenth-century justice was private, local and amateur rather than central and professional. As a result most people, even in the Lowlands, had little to do with central authority. Patronage and personal links remained significant from the humblest interactions of the village level to high politics with local independence jealously guarded. For example, attempts to introduce Justices of the Peace on the English model in the early seventeenth century were unpopular and largely unsuccessful. Efforts to integrate the Highlands and Islands into a national polity were even less successful, perhaps because of the naked hostility to Gaelic values shown in, say, the 1609 Statutes of Iona. This apparent ‘weakness’ of the crown in fact helped to produce beneficial results, notably a comparative absence of friction between central and local authority shown in the relations between crown and towns which were ‘peaceful to a degree rare in Europe’, though the demands of the crown on the towns were undoubtedly increasing in the latter part of the reign of James VI.139

Yet central government was beginning to penetrate localities, especially after the end of the sixteenth century and again from the late seventeenth century. There were five main reasons for this. First the growing power of centralised justice. Civil courts were reformed in the 1530s (based on the Edinburgh Court of Session) and criminal ones in the 1590s. Edinburgh lawyers strove to extend their sway over all of Scotland, a signal example being the replacement of Norse by Roman law following the expulsion of Earl Patrick Stewart from Shetland 1611–12. After 1672 the reconstituted High Court of Justiciary and its circuit courts from 1708 helped to extend central criminal justice over all of Scotland even before the abolition of heritable jurisdictions in 1747. Second, the growth of internal trade and marketing brought more people into contact with towns and with officials. Extensive credit networks, operated notably by Edinburgh lawyers and merchants, were usually secured by wadset or personal bond. Third, the reformed church after 1560, with its hierarchy of courts, its schools and its


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efforts to convert the Catholic Highlands, acted as a force for integration. Fourth, a general growth of taxation and bureaucracy. Fifth, and particularly significant in the Highlands, military service outside the local area and military campaigns against it.140

Other, indirect, sources of discipline were similarly unhelpful to the authorities. The poor laws encompassed comparatively few people and could not be used as a means of social control over the whole of society. More important was the judicial system, since Scots criminal law was weighted against the accused to a greater degree than English and the whim of the judge was more important – as the radicals found to their cost in the 1790s.141 The dispersed nature of Scottish rural settlement may also have militated against group action. Social change occurred gradually for the most part, removing the sharp goad which could have provoked riot. In addition there was no long-established tradition of independent action by the ordinary rural people.

The nature of protest also differed from that in England or Europe. Unlike England, rural protests were almost never led by the gentry and clergy, hardly surprising in the latter case since the men of God often came from gentry backgrounds and were usually paid by the substantial landowners in the parish. The Scottish Kirk was very much the mouthpiece of the lairds, the Duke of Argyll thinking it not amiss to use the church on Tiree to announce changes in his leasing policy in 1756.142 Those worth more than 40 shillings of freehold had the vote in English counties but the qualification in Scotland was more than £30 sterling and it is therefore hardly surprising that political participation was restricted to a mere handful: there were only 2,662 names on the freeholders' list in 1788 out of some one and a half million people, and only half of the names on the roll belonged to real individuals.143 Before 1660 the vote was limited to a handful of feudal landowners, and the extension of the franchise after this date was part of their effort to increase their hold on society rather than an expression of democratic ideals. It is perhaps not surprising that the Scots had a reputation for being less politically militant at parliamentary elections than the English or Irish, especially before 1660.

An absence of riot did not preclude other expressions of discontent or the existence of violent means of solving disputes between individuals or groups. The strong grip maintained by the lairds over the rural masses in

141 ibid., 222; However, the kirk sessions were not completely in the pockets of the lairds as they sometimes pursued even the rich and powerful when they offended against moral prescriptions.
the Lowlands produced a relatively orderly, authoritarian society. The solution of disputes by force died out over most of the Lowlands in the later seventeenth century. This was a major change from earlier conditions and was marked in the landscape by the abandonment of fortified houses and their conversion or replacement by undefended mansions. The lords’ domination in the Highlands and the North could be used as a weapon against each other, as in the struggle between the houses of Huntly and Moray in the North East in the late 1580s and early 1590s, or against the political establishment, as became clear in 1715 and 1745. A century before, the crown determined to spread law and order to the ‘Hielands, where none officer of the law may goe for fear of their lives’ but success was slow to come. Cattle raiding continued in the Highlands until the middle of the eighteenth century, the Lochaber district being one of the worst areas for freelance cattle reiving. The Highland margin was described in 1694 as ‘a perfect nurserie of thieves’ and in 1721 the Duke of Atholl talked of a way of life when he described ‘the abominable trade of thieving’.

The other troublesome region, the Borders, had effectively ceased to be a problem by the end of James VI and I’s reign: feuds and large-scale group theft had disappeared there by the 1620s. Violence and a tradition of independent action among the lairds was slower to end north of the Border than south for two reasons. First, the Scottish gentry were less closely tied to the central government politically or socially than were their counterparts in Cumberland or Northumberland. Remoteness from central authority and the laissez-faire nature of royal control before the later sixteenth century allowed family feuding to survive to a later date than in England. The ‘feud’ was much less violent than is often assumed: it could describe any dispute and the concept of groups in opposition helped to contain civil and criminal actions. Second, the existence of separate governments and legal systems in Scotland and England until 1603 made escape across the Border simple. The creation of a Border Commission which could operate in both countries solved the interstitial problems which allowed bandits to continue operating in other parts of Europe such as the boundaries between the Low Countries, Germany and France or areas of Spain. Scotland was always a very disciplined, if not necessarily very orderly, society, but probably not any more intrinsically violent than England. The legal system stressed compensation rather than retribution as the end of

144 Simm (1972): 189-3.
145 Greig (1979): 100.
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justice for most of the early modern period. Depersonalised justice was not the norm and local, informal settlement of disputes by lairds, clergy and neighbours was extensive.\textsuperscript{150}

RELIGION, EDUCATION AND POPULAR CULTURE

To some extent at least, the lack of religious divisions in Scottish society may help to account for the low level of riot, especially when contrasted with sixteenth- and seventeenth-century France or Germany. There was no ‘German Peasants War’ in Scotland and none of the fierce iconoclasm and bloody massacres of sixteenth-century France. Scotland is often portrayed as an archetypal Protestant country on Dutch or German lines. The conventional image of the Protestant Reformation in Scotland is of mass support for Calvinism; in fact recent research has shown that popular support for the Protestant cause was very slight before the (mainly political) Reformation of 1560 and there is little evidence to suggest that the Scottish church in the 1550s was in a particularly bad state. Even in the 1560s and 1570s Calvinism drew its support principally from urban merchants and professionals and from the gentry as it did in France.\textsuperscript{131} Some dioceses such as Dunblane took a very conservative stance at the Reformation, other areas such as Fife or Angus were more receptive to the reformed faith.

The Scottish church tried to make the population godly and obedient, and seems to have been fairly successful, at least in the seventeenth century. Unlike Dutch Calvinists, the Scots were able to impose godly discipline on all members of the parish community, and not simply on the minority who chose to join the congregations and to submit voluntarily.\textsuperscript{152} The kirk session used the testimonial system and religious sanctions such as excommunication and withholding baptism to enforce its viewpoint.\textsuperscript{153} For troublesome cases it could work with the secular magistrate in the best Genevan tradition. This desire for order and conformity was common to all religious and political elites in early modern Europe. The heyday of church discipline took place in the seventeenth century, but even then there were problems in ensuring conformity and some parts of Scotland remained staunchly Catholic or traditional. Indeed, the drive for religious conformity was conspicuously less successful than in contemporary Sweden. Growing religious diversity from the time of the Restoration destroyed the hold of Calvinist discipline as both lairds and people began to find

\textsuperscript{150} Wormald (1981): 38.
alternatives to the (post-1690) Presbyterian Kirk. The Secession of 1733, the creation of a ‘Relief Church’ in 1761 and finally the great Disruption of 1843 mark out the eighteenth and early nineteenth centuries in Scotland (as in England) as the golden age of religious pluralism.154 Eighteenth-century social and intellectual life were increasingly secular in their emphasis but this development stemmed from the religious discipline and aspirations of the seventeenth century.155

Determining the quality and quantity of religious belief among the population at large is notoriously difficult. Scotland was regarded by observers such as Daniel Defoe as a particularly godly nation but he probably exaggerated.156 This was certainly a religious age, but as in other European countries the extent of mass commitment was very variable. An interest in religion is obvious at the grass roots level from concern over the choice of a new minister to the dramatic enthusiasm shown at the famous evangelical revival meetings at Cambusbarron in the 1740s.157 Yet, in the eighteenth century, church attendance was far from universal and the 5 acts of the Scottish parliament (not to mention the 15 of the General Assembly of the Church of Scotland between 1690 and 1726) to enforce observance of the sabbath suggest that efforts were less than totally successful. Thomas Boston, an eighteenth-century preacher, was saddened by poor attendance at church.158 Sober piety rather than vehement emotional commitment characterised popular religion. Nor was Scotland solidly Presbyterian after the Reformation: the first model presbyteries were not set up until 1581. episcopacy prevailed to 1638 and from 1662 to 1690, and there were always areas such as the north east which favoured this form of organisation throughout. Recusancy flourished in the south west in the late sixteenth century and Jesuit missions operated in the north and west of Scotland between the 1670s and 1770s. The reformed kirk was represented in most Highland parishes by 1574 but popular support seems to have been very slight.159

The kirk sessions of post-Reformation Scotland were not simply instruments of moral and religious control. They also carried the administrative burden of the parochial responsibility for poor relief. Scottish poor relief

154 A.D. Gilbert, Religion and society in industrial England (1976); A.J. Hayes, Edinburgh Methodism, 1761–1775 (1976);
155 A.C. Chittis, The Scottish enlightenment: a social history (1976);
156 R.A. Houston, Scottish literacy and the Scottish identity (1985a): 259;
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was more personal, informal and flexible than the English system and until the eighteenth century was probably less effective. Similar laws were in force but they operated differently in practice. Voluntary collections were organised by the kirk, the funds administered and disbursed by kirk session members. In times of crisis, parish poor relief was probably a small proportion of total income for the indigent who were aided by multiple inputs from formal and informal charity, including friends, neighbours, landlords, relatives, begging and private charities. Few stayed on poor relief for very long since in Scotland it was regarded as a temporary measure rather than permanent support as it became increasingly in England during the seventeenth century.\(^{160}\) Compulsory rating was unusual and unpopular, an expedient to be adopted only in desperation and, unlike in England, casual begging was still tolerated. Overall, the system resembled that of France or Prussia more than of England or Denmark.\(^{161}\)

Elements of social and cultural continuity and change are encapsulated in the Scottish witch craze. The Scottish witch-hunt was bloodier than that in England, with approximately ten times the number of executions per head of population. A higher proportion of Scottish witches were men: a fifth compared with a tenth in England. The executions took place later than in England, and the timing of the most severe episodes was slightly different: in England the peaks came in the middle and late sixteenth century, in Scotland between the 1620s and 1660s. Where English witchcraft was extensive, hardly an Essex parish escaping some contact with witchcraft prosecutions. Scottish witchcraft was localised in certain communities such as Paisley in 1697, and concentrated in the cast-central Lowlands: it was almost unknown in the Highlands and Islands where Catholic and pagan survivals made some of the proscribed activities of the witches much more widely acceptable. Some of these differences can be attributed to the distinctive social characteristics of the two countries, others to the Roman legal system which allowed the use of torture in Scotland and which emphasised covens and the pact with the devil more than in England. The nature of confessions therefore differed and there were more multiple cases of necromancy in Scotland.\(^{162}\)

Continuity was also evident in education and culture. With education as with poor relief, the 'reformers inherited and retained attitudes and beliefs from their predecessors'.\(^{163}\) The Protestant reformers of 1560 had advocated widespread education as the best way of protecting and nourishing


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the new faith, and of providing trained officials for church and state. However, it was not until the seventeenth century that Acts of the Scottish Parliament (1616, 1633, 1646 and 1696) set up a network of parish and burgh schools funded partly by the landowners and partly by fees; a few gifted poor might receive free education. By the end of the seventeenth century most parishes in the Lowlands had an official school and teacher, though in the Highlands educational provision was poor throughout the period and in the eighteenth century the most significant improvements were brought about by an independent, Edinburgh-based charitable body called the SSPCK (Society in Scotland for Propagating Christian Knowledge). The parochial system was supplemented by adventure or private schools which relied solely on fees and which usually taught only elementary subjects such as reading, writing and religious knowledge. This arrangement was very different from England where schools were mostly funded by fees or by charitable endowments.164

Differences in institutions and the dynamic role of Calvinism in encouraging literacy are said to have created one of the most literate populations in the seventeenth- and eighteenth-century world, on a par with major success stories such as Sweden, New England and Prussia. Scotland did enjoy high literacy but it was very far from being exceptional in a European context. Despite differences in the structure and funding of education between the two countries, literacy levels were similar in Scotland and England, and almost identical in Lowland Scotland and the four northern counties of England: 75 per cent male illiteracy c.1640 and 33 per cent c.1760. Scotland never managed to equal the near-total literacy of New England men during the eighteenth century and there is no firm evidence of a particularly pervasive reading tradition on the Swedish model. Demand for serious religious, historical and literary works does seem to have been more broadly based in Scottish society than it was in England.165 Achievements were confined to the Lowlands since education, and indeed the habit of keeping formal documentation and using written forms for social and cultural purposes, were poorly developed in the Highlands, which remained steeped in illiteracy until well into the nineteenth century.166

Scotland had three universities in 1500 and a fourth when Edinburgh was established in 1583. Glasgow’s flagging fortunes were revived in the 1570s by Andrew Melville, whose influence spread in some measure to the other centres and enabled Scotland to participate in the European ‘edu-

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cational revolution' of the period.\textsuperscript{167} These institutions were small, cheap to attend and accessible. Some Scots went abroad while foreigners came to Scotland for higher education. The social spectrum of students was much broader than at Oxford and Cambridge and the proportion of eligibles among the highest in Europe. Furthermore, and with the notable exception of St Andrews, Scotland's universities flourished in the eighteenth century when institutions of higher learning elsewhere in Europe were generally experiencing stagnation or contraction. Improvements in curricula and teaching methods put Scottish universities in the forefront of European intellectual advances, and the proportion of the population attending rose steadily during the eighteenth and nineteenth centuries.\textsuperscript{168}

Universities were vital to the flowering of the Enlightenment in the major cities of an otherwise poor and backward country. The Scottish Enlightenment was an elite phenomenon which had its origins in the nation's educational system, political history, close-knit society, economic development and international ties, and in the declining role of religion in social and intellectual life. Scotland's contribution to this European movement lay notably in the fields of medicine, law, philosophy, 'economics', geology and history, its particular emphases being on 'civic humanism' (obligation, personal morality and social coherence), natural jurisprudence and the concept of 'improvement' in economy and society; the ultimate goal was an improved understanding of, and ability to shape, human society.\textsuperscript{169}

The world of Hume, Smith, Robertson and Carlyle, of learned societies and elite clubs has been extensively studied. By contrast, research into Scottish mass culture is poorly developed beyond work on Burns, Hogg and other popular poets.\textsuperscript{170} It is, nevertheless, possible to make some tentative generalisations. The culture of the printed word was gaining in strength throughout our period. The first printing press was set up at Edinburgh c.1507–8 and low production costs made the capital a centre of printing for England and Europe during the eighteenth century. Yet print did not wholly replace the traditional oral culture. Among the common people of the Lowlands and throughout the Highlands, recreations, and indeed much of the process of socialisation, were grounded in face-to-face interactions. Oral culture in the Highlands was rich and densely textured. Featuring ballads and tales about heroes, lords, wars and love, it resem-


\textsuperscript{170} A. Mitchell & G.G. Cash, A contribution to the bibliography of Scottish topography (1917):514–33 for printed sources.
bled Ireland and north-western France more than England. In the Inverness and Dingwall area during the later seventeenth and early eighteenth centuries frequent efforts were made by kirk sessions to stamp out activities such as well-dressing, bonfires, guising, penny weddings and dancing, suggesting that elements of traditional popular culture were strong.\(^{121}\)

By comparison, the popular culture of the central Lowlands and south east was ritually impoverished. Recreations included golf, archery, tavern-haunting, fencing, hunting and riding for the upper classes while football, drinking, walking, dancing, the abuse of animals by humans and other animals and miscellaneous fireside sociabilities formed the staple of working-class leisure. Group sociability focused around baptisms, weddings and burials with drink playing a central role.\(^{122}\) The Scots appear to have been less musical than the French, English or Welsh though there was a flourishing ballad tradition, notably in the Northern Isles and north-east Lowlands. Music at both a popular and elite level had flourished before the Reformation and the post-Reformation church did not immediately proscribe it: some towns retained minstrels long after the Reformation and it is possible to argue that (the largely monodic) folk music flourished throughout the seventeenth century.\(^{123}\) By the 1630s, however, church music was mostly in the form of plain metrical psalms. Much popular culture went underground in the seventeenth century but re-emerged and flourished in the eighteenth despite rearguard actions by the kirk and Societies for the Reformation of Manners: a ‘dancing boom’, the replacement of the pipes by the fiddle and the writing of new songs are examples.\(^{124}\)

There were three reasons for the relatively impoverished nature of Lowland Scotland’s popular culture in the seventeenth and eighteenth centuries. First, the Calvinist proscription of many traditional festivities such as Yule, condemnation of ‘promiscuous dancing’ and excessive drinking, and insistence on the profitable (godly) use of spare time helped to curb many communal recreations. The worst ‘killjoy’ period was the middle of the seventeenth century, but it would be wrong to regard the reformed kirk as a necessarily philistine or depressing institution since it clearly fostered education and other cultural forms. Prolonged campaigns against certain types of wedding festivities produced no long-term decline of these forms of sociability. However, many of the pre-Reformation urban

\(^{121}\) M. Martin, *A description of the western isles of Scotland* (1703); S. Maclean, ‘Obscure and anonymous Gaelic poesy’ (1986). We are grateful to Bob Dodgson for the information about Inverness and Dingwall.


\(^{123}\) Cowan (1980).

Introduction

rituals such as Hammermen’s plays in Perth and Edinburgh, deemed to smack of popery, did suffer during the 1570s and 1580s. The censorious attitude of the reformed church was based not only on religious precepts but also on a concern for order shared with secular authorities which made church and magistrates nervous of large gatherings. Second, rural settlement outside the south-east of Scotland was dispersed and nucleated villages of the kind found in Lowland England or many parts of France and Spain did not exist. This militated against activities which involved the participation of large numbers of people. Finally, developing cultural polarisation followed social and economic differentiation in the eighteenth century ensuring that the traditional recreations became restricted increasingly to the lower orders while the richer and better educated middling ranks took new activities which would remove them physically and culturally from association with those recreations. There was something of a cultural revival after the end of the seventeenth century. Royal patronage of music and the theatre declined when the court left Edinburgh in 1603 and despite a brief revival in the 1670s it was not till the early eighteenth century that they began to develop once more, particularly in the towns. Professional theatre and music flourished in Edinburgh from the 1720s and this, along with the social ‘season’, intellectual clubs and the widespread drinking of hot beverages in tea and coffee houses, spread to the lesser urban centres during the eighteenth century.

This volume presents a series of studies of major themes in Scottish social history. These are designed to serve as overviews of their respective fields, but at the same time they incorporate the findings of recent research. Throughout the book, emphasis has been placed on setting the Scottish experience within the context of other contemporary European societies. Taken individually and collectively the chapters on towns, women, the standard of living, population mobility, the Highlands and socio-economic change emphasise the recent nature of much work on Scottish social history, stressing new perspectives, new questions about the nature of Scottish society in the past, and new directions for future research.

This book is not designed to be comprehensive, but in order to place the specifically Scottish material within a broader context we have invited an English and an Irish social historian to provide perspectives from the outside. Its aim is to tell those not raised in the sometimes narrow

177 D.F. Harris, Saint Cecilia’s Hall (1899); J.H. Jamieson, ‘Social assemblies of the eighteenth century’ (1933).
R.A. Houston and I.D. Whyte

traditions of Scottish history about her society in the early modern period and to illustrate its relevance to a broader and fuller understanding of the nature of European societies and the ways in which they changed before the Industrial Revolution.
1

POPULATION MOBILITY IN EARLY MODERN SCOTLAND

I.D. WHYTE

INTRODUCTION

Population mobility has attracted the attention of social and economic historians and historical geographers seeking to understand past societies. Levels and patterns of geographical mobility reflect many aspects of social conditions and are in turn an important influence on society. Geographical mobility is closely linked to social mobility, together demonstrating the degree to which past societies were fixed and rigid or fluid and permeable. Population mobility is also closely linked as both a dependent and an independent variable to family and household structures, regional contrasts in agricultural systems, holding structures and patterns of rural industry, and levels of urbanisation and is therefore an important social indicator and determinant.

Recent research has altered the image of geographical mobility in pre-industrial European societies, overturning past preconceptions which regarded them as being static and immobile. Studies of rural mobility and migration to the towns have shown that movement was normal, particularly among younger people, though often over limited distances. For early modern England, population mobility has been linked to the development of the economy and society in the prelude to the Industrial Revolution. Given that Scotland underwent major social and economic changes between the sixteenth and later eighteenth centuries, the question arises as to whether the scale and pattern of mobility in Scotland was comparable with England or, more generally, with the patterns which have been identified more widely in Western Europe. The Scots were highly mobile both at home and overseas in the nineteenth century: was this a recent development or was it also a feature of Scottish society in earlier times? The remarkable mobility of the Scots within Europe during the sixteenth and seventeenth centuries has often been commented on.

2 Ibid.  
4 T. A. Fischer, The Scots in Germany (1902); T. A. Fischer, The Scots in Sweden (1907); J. Harrison, The Scot in Ulster (1888).
emigration is often an extension of internal population movements; this implies high levels of mobility at home; but can this be demonstrated? Little attention has been paid to internal migration in Scotland before the nineteenth century. Even Flinn’s major study of Scottish population considered mobility only as an incidental demographic factor. Within the last few years, however, two things have become clear. First, there are a number of untapped or under-exploited sources capable of shedding light on population mobility in pre-industrial Scotland. Second, preliminary analysis indicates that high levels of mobility did exist and that in many respects Scotland’s experience was similar to that of the rest of North-Western Europe. The present chapter considers patterns of population mobility in early modern Scotland and assesses their implications for Scottish society. The main features of geographical mobility in Scotland are compared with those of other contemporary European societies. The limitations of current knowledge will rapidly become apparent and some future lines of enquiry will be suggested. Attention is focused on mobility within Scotland. Emigration, which has received much more attention in the past, is not considered.

CONTROLS ON MOBILITY: GEOGRAPHICAL AND ECONOMIC

Population mobility in early modern Scotland was influenced by a range of geographical, economic, demographic, social, legal and institutional factors. The ruggedness of Scotland’s topography has often been stressed as a barrier to communications but this should be seen as channelling mobility in particular directions rather than necessarily inhibiting it. The importance of coastal and freshwater transport should not be forgotten. Travel by water was easier than journeying overland, even for the poorest migrants. Efforts by Edinburgh’s burgh council to stop beggars from arriving by sea at Leith from Fife and other destinations show that an early modern equivalent of hitch-hiking was available even to vagrants. Nevertheless, one might look for signs that mobility increased over time in terms of levels of movement and the distances travelled as communications improved and the penetration of commercialisation into once-remote rural areas generated more contact with the outside world.

In cultural terms the strongest barrier to mobility was the divide between Highland and Lowland, a distinction based on differences in language as well as society which existed by the fourteenth century and sharpened thereafter. This gulf was only an extreme example of the settled

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Lowlander's distrust of the more footloose Highlander; instances of which can be found throughout Europe in early modern times. Contact between Highland and Lowland did occur though. There was a two-way traffic in agricultural produce across the Highland line, Highlanders bringing livestock, timber and other upland commodities to Lowland markets in exchange for grain. In the seventeenth century, the taking of Lowland cattle to the hill grazings or 'shielings' and the droving of Highland livestock to the Lowlands was also becoming commonplace. However, Highland society was largely closed to Lowlanders until as late as the first half of the eighteenth century, although some groups of people, such as merchants, the clergy and the military did travel there, while Highlanders who ventured into the Lowlands tended to be regarded with suspicion and mistrust. Perhaps the most important change in general patterns of mobility in Scotland during the eighteenth century was the increasing permeability of the Highland/Lowland boundary with the development of seasonal and permanent migration from the Highlands.

In early modern England, Ireland, France and elsewhere in Europe there were often marked contrasts between the economic and social structures of adjacent regions leading to migratory movements between them. Much emphasis has been laid on the contrast between arable and wood pasture areas in early modern England. Surplus population tended to move from champion areas to wood pasture or upland regions in search of opportunities though this might be reversed in years of dearth when starvation forced the inhabitants of these more marginal areas on to the roads towards the cereal-growing Lowlands.

In Scotland there does not appear to have been any counterpart of England's wood-pasture regions or areas of in-migration and squatter settlement. Some medieval hunting forests were opened up for colonisation as late as the sixteenth century; but these internal frontiers were few in number and limited in extent. Although there were variations in agriculture with an emphasis on cereal production in the more fertile Lowland areas and a greater concentration on livestock rearing in the uplands there was probably less regional variation in Scottish agriculture than in many European countries. The tenurial status of much rough pasture in Scotland effectively prevented the development of fringes of squatter

settlement which could absorb surplus manpower from the more populous Lowlands. A good deal of rough pasture was held as commonty, in shared ownership between two or more proprietors.\textsuperscript{16} Under this system the rights of proprietors could only be maintained with the land in stinted pasture. Encroachment for cultivation by squatters infringed the heritors’ collective rights and was vigorously resisted. This helps to explain why upland regions with concentrations of rural industry never developed in Scotland as they did in the Pennines or Switzerland. Dodgshon has shown that there were broad regional differences in average holding sizes in seventeenth-century Scotland; holdings were smaller in the North East, increasing in size southwards towards the Lothians and the Merse. They were smaller again in the western Lowlands.\textsuperscript{17} This must have produced differences in the social structures of communities; in the proportion of tenants, cottars, farm servants and landless labourers and also in the hierarchy of tenant farmers. It is unlikely, however, that such contrasts led to marked patterns of mobility due to movements those in search of land as did the contrasts between champion and wood pasture areas in England. In Scotland, holding structure was a matter of landlord policy, and excessive subdivision due to population pressure does not appear to have been countenanced before the advent of crofting in the north-west Highlands at the end of the eighteenth century in the way in which it sometimes occurred in Ireland.\textsuperscript{18}

On the other hand the maintenance until the later eighteenth century of the cottar system, whereby much of the extra-family labour on tenanted farms was provided not by landless labourers but by cottars who sublet small shares of the arable and grazing in return for providing regular or seasonal assistance, meant that access to land, albeit in a modest way, was fairly general.


Population levels and their relation to resources were an important influence on mobility in pre-industrial Europe though the link between demographic growth and mobility could operate in different ways. In England population growth in the sixteenth and early seventeenth centuries caused poverty and increasing vagrancy.\textsuperscript{19} In Ireland, however, it has been suggested that population growth in the seventeenth and eighteenth centuries decreased internal mobility by making it harder for families to move and take up new land in other areas.\textsuperscript{20} Unfortunately, we

\textsuperscript{16} I.H. Adams, ‘Division of commonty’ (1967).
\textsuperscript{17} Dodgshon (1981): 214-17.
\textsuperscript{18} Cullen (1981): 89-91.
\textsuperscript{19} J. Pound, Poverty and vagrancy (1971).
\textsuperscript{20} Cullen (1981): 89-91.
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know little about demographic trends in Scotland in the sixteenth and seventeenth centuries. There are certainly indications of a substantial rise in population; Edinburgh doubled in size during the century after 1540, particularly after the plague of 1584. Much of this growth is likely to have been generated by migration from the countryside, suggesting a build-up of rural population. The same period witnessed the large-scale emigration of Scots to the continent as traders and mercenaries, and to Ulster. It also saw increasing stress on problems of poverty and vagrancy at home.

These indications suggest a growing population pressing on limited resources with growing involuntary mobility among the poorer elements of society. To a greater extent than in England the effects of secular population growth in Scotland seem to have been checked by periodic subsistence crises and, particularly in the seventeenth century, by emigration. There are some indications that the Highlands may have had a separate demographic regime from the Lowlands, with a relatively steady build-up of population from the early seventeenth to the later eighteenth century. In the Lowlands, population growth may have levelled off in the mid-seventeenth century due partly to the famine of 1623, the epidemics of the 1640s, and continued emigration, but there may have been some renewed build-up before the onset of the famine of the late 1690s as vagrancy appears to have been on the increase once more. Mortality and emigration due to this crisis checked population growth abruptly; recovery was so slow that the population enumerated by Webster in 1753 may not have been much greater than that of the early 1690s. The continuation of major subsistence crises down to the end of the seventeenth century in the Lowlands and later in the Highlands suggests that the kind of mobility termed by Clark 'subsistence migration' persisted longer than in England. Clark has shown that in England the operation of the Poor Laws, and restrictions on settlement culminating in the Settlement Act of 1662, which may merely have institutionalised changes already occurring in society, helped to reduce long-distance migration from the late sixteenth to the late seventeenth century. On the other hand landlord control over population movement and settlement in England could be patchy as the distinction between open and closed rural parishes emphasises. In Scotland the power of landlords to control population on their estates through tenancy and the operation of baron courts, and at a parish level as

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kirk session elders, was considerable. As Mitchison has shown, the original Scottish Poor Law was modelled on that of England but developed differently, particularly in its failure to provide relief for the able-bodied but unemployed poor. Poor relief was undertaken by individual kirk sessions and the lack of effective central control meant that considerable differences could exist in the ways in which parishes organised relief and the scale of charity provided, even at the end of the seventeenth century. Whether this produced local drifting of vagrants from stricter towards more generous parishes remains to be demonstrated. Between the sixteenth and the early eighteenth century, and in some measure even later, Scotland was characterised by a fluid group of begging poor, always substantial but liable to increase dramatically during crisis years such as 1623 and the later 1690s. In Scotland, population mobility is likely to have been encouraged by the inability of central authorities to make legislation against vagrancy stick and by the fact that many kirk sessions provided some charity to non-resident paupers. The lack of strictly-enforced settlement laws also encouraged mobility.

The most effective controls on population movement were local rather than national. Kirk sessions issued testimonials certifying the good conduct of individuals, without which they might not have been permitted to settle in another parish. However, the variability of survival of testimonials among kirk session records may indicate that the operation of the system was patchy and that movements without certificates was possible. Some landowners passed acts in their baron courts prohibiting the settling of new cottars or the sheltering of strangers without permission. This might suggest draconian local control over population movements but some instances clearly relate to crises, such as the later 1690s, when there were unusual numbers of people on the roads and parish poor relief was stretched trying to meet the needs of resident poor.

Some groups such as coal and salt workers had their mobility restricted legally by a form of servitude. Burgh councils sometimes tried to control the movement of labour, particularly at harvest time. In 1680, for example, the burgh authorities of Peebles were concerned at the potential shortage of labour for harvesting on the burgh's own lands due to inhabitants going as far as the Lothians to help with the harvest. The legislation against vagrants was probably more strictly applied in the towns, particularly Edinburgh where the authorities were under the eye of the Privy Council, though they could lodge in suburbs outside the burgh limits. 

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less, the frequency with which Edinburgh’s burgh council issued proclama-
tions requiring non-resident beggars to remove from the city on pain of
whipping or imprisonment suggests that these measures had little effect.
Overall official attempts to control population movements, and in par-
ticular vagrancy, whether at a national or more local scale, appear to have
had limited success and there were probably fewer effective institutional
constraints to geographical mobility than in England.

RURAL-URBAN MIGRATION

Rural-urban migration was an important element in population mobility
in early modern Western Europe. As average death rates in capital cities
and larger provincial towns were higher than in rural areas, a constant
influx from the countryside was required to maintain urban populations
and allow for growth. Two broad categories of migrant to pre-industrial
towns have been defined by Clark: betterment migrants who were gen-
erally young, single and upwardly mobile, and subsistence migrants,
motivated by influences driving them out of the countryside as much as
the positive attractions of the towns.37 These groups can be distinguished
in pre-industrial Scottish towns though not always with clarity. Together
they produced a pattern in which, against a background of steady
in-migration, the larger towns experienced surges of incomers motivated
by both push and pull factors. Down to the 1640s, epidemic diseases,
particularly bubonic plague, could kill a substantial proportion of a town’s
population in a single season. In Edinburgh the outbreaks of plague in
1644–5 are estimated to have taken 9,000–12,000 lives, some 25–33 per
cent of the population.39 Such disasters were commonly followed by waves
of migrants seeking opportunities. Apprenticeship migration to Edinburgh
in the aftermath of the 1644–5 epidemics was almost three times the level
for the previous few years.40 On the other hand, dearth in the countryside
could cause rural dwellers to flood into the towns in search of food and
charity. This section will focus on the ‘betterment’ type of migrant,
‘subsistence’ migrants being considered below. see pp. 54–7.

It has been suggested that Scotland was lightly urbanised in the
sixteenth and seventeenth centuries, and compared with many parts of
Europe this was true.40 De Vries has shown, however, that by 1600 the
proportion of Scotland’s population living in the larger towns exceeded
that of Scandinavia, Switzerland and most of Eastern Europe.41 By 1700
Scotland was more highly urbanised than Germany and by 1750, France.

37 Clark (1972).
38 Flinn (1977): 147.
39 F.J. Grant, Register of apprentices of the city of Edinburgh (1906).
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The proportion of Scotland's population living in the larger towns nearly doubled from a very low level between 1500 and 1600, and doubled again between 1600 and 1700, a rate which was twice that of England. By the end of the eighteenth century Scotland was one of the most urbanised societies in Europe. Much of this growth must have been generated by sustained migration, surely one of the most important influences on economic development and social change in Scotland in the seventeenth and eighteenth centuries. Scotland's urban hierarchy contrasted with that of England. At the end of the seventeenth century Edinburgh held less than 5.0 per cent of Scotland's population while London had 10.6 per cent of England's, but Scotland had a higher proportion of her population living in other towns with over 10,000 inhabitants, a situation more comparable with France where provincial cities were larger and more independent than in England. In some respects Scotland's urban hierarchy resembled that of England minus London. One might thus expect there to have been marked regional patterns of movement into Scotland's main provincial centres with Edinburgh playing less of a national role than London.

Migration into Scotland's major towns can be studied using various sources. Apprenticeship records are available for many Scottish burghs. Apprenticeship migration was not a surrogate for all urban in-migration but it may have been representative of the movement of young, single people who formed the most dynamic component of the migration stream. Analysis of apprenticeship migration to Edinburgh in the seventeenth and eighteenth centuries has shown that the capital did have a national apprenticeship migration field, drawing recruits from every part of Scotland. There was a marked distance decay effect with a high proportion of migrants originating from areas close to the city. Numbers of migrant apprentices were greatest from source areas with high population levels but dropped with increasing distance from Edinburgh. Additional factors distorted the migration field so that when the effects of population and distance are allowed for, certain areas sent more or fewer migrants than predicted. In the late seventeenth century most of south-east and central Scotland sent more apprentices to Edinburgh than predicted, as did Aberdeenshire, while Fife, Perthshire, Angus and Kincardineshire sent fewer. Fife and the Tayside lowlands contained many burghs offering local opportunities to prospective apprentices, but the pull of Glasgow was not yet strong enough to check the flow of apprentices to Edinburgh from west-central Scotland. High levels of migration from the south-east probably relate to the lack of other large urban centres in this area while those

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43 J. Patten, 'Movement of labour to three pre-industrial East Anglian towns' (1975): 114.
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from Aberdeenshire may be explained by contacts generated through coastal trade.

During the eighteenth century, Edinburgh's apprenticeship migration field contracted in an irregular fashion. There was a fall in the proportion of apprentices drawn from south-west and west-central Scotland, Argyll and Bute and the Borders. Migration from Fife, Angus and Kincardineshire remained low. On the other hand migration from Highland Perthshire, Inverness, Ross, the Moray Firth, Caithness and Shetland was higher than expected. The reduced flow of apprentices from west-central Scotland and the south-west Highlands was probably due to the rise of Glasgow and other urban centres in the western Lowlands. The drop in migrants from the Borders may reflect increasing contact with England after 1707 and the growing attractiveness of Tyneside for Scottish workers. On the other hand, as the Highlands became more integrated with the rest of Scotland, migration from this region to Edinburgh grew. Edinburgh's role as the centre of east-coast trade and the business contacts which this generated may help explain the high levels of migration from the Moray Firth and beyond. The differential contraction of Edinburgh's migration field due to the growing importance of other urban centres parallels that of London at an earlier date.

The changing pattern of apprenticeship migration to Glasgow complements that of Edinburgh. In the seventeenth century, Glasgow drew apprentices from a limited area. Lanark, Renfrew and Dumbartonshire accounted for 77 per cent of migrant apprentices between 1625 and 1649. Few apprentices came from Ayrshire, Galloway or the Highlands. From about the 1730s there was a widening of the recruitment area largely due to an increase in apprentices from the Highlands. By the mid-eighteenth century, Argyll was supplying 22 per cent of Glasgow's migrant apprentice tailors compared with under 3 per cent at the start of the century. At the same time the city's pull increased eastwards, drawing more apprentices from Stirlingshire and Perthshire. By the end of the century, apprentice tailors were also being recruited from more distant counties like Inverness, Ross, Sutherland and Caithness. By contrast apprenticeship migration into Aberdeen and Inverness remained remarkably stable. These two burghs dominated lightly urbanised regions with no real competing centres. Seventy-five 75 per cent of migrants to each town were drawn from

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3. The information on migration to Glasgow is based on an analysis of 2,000 records from various trades incorporations in the Strathclyde Regional Archives. I am extremely grateful to Mr R. Dell, the chief archivist, for making available a set of transcripts of seventeenth-century apprenticeship origins.
4. I.D. Whyte & K.A. Whyte. 'Migration of apprentices to Aberdeen and Inverness' (1986).
with a 40 kilometre radius. Aberdeen’s migration field did, however, become increasingly curtailed to the south, probably due to the growing pull of Dundee.

It would be a mistake to consider apprenticeship migration fields as completely homogeneous. As Houston has shown, apprentices to Edinburgh merchants mostly came from landed backgrounds as did those of goldsmiths and surgeons. Apprentices to lower-status trades were more likely to be drawn from craft or tenant backgrounds. There were close links between guild status, the social origins of apprentices, and the average distance migrated. Recruits to higher-status guilds were drawn from a wider area than those coming into lower-status ones.

Marriage registers are useful for examining female migration to Scottish towns. The format of some Scottish urban registers allows analysis of the movement of women before as well as at marriage. Where a woman lived in a town when the banns of marriage were proclaimed but her father was recorded as living elsewhere, then a migratory move had probably been made before, rather than at, marriage. With irregular marriages, the period of residence in the town prior to marriage may have been brief. In most instances, however, the move is likely to have been made some time before marriage for the purposes of employment. As with virtually all sources only one move is recorded. One cannot assume that a single move between home and town had always been made or that the father’s parish of residence was invariably that of his daughter’s birth, but in a high proportion of cases this was probably so. Where the residence of a woman was given as being with her father in a parish outside the town then presumably migration took place at rather than before marriage. In such cases the contact leading to marriage may have arisen in various ways. The groom may originally have come from the bride’s place of residence, and maintained contact after migrating to the town. Alternatively, the bride may have lived in the town, met her marriage partner there, and then returned home. A third possibility is that contact was made during regular trips into or out of the town by one of the partners: to attend markets for instance. This last form of contact would involve a more local field of activity corresponding to the ‘marriage distances’ of previous studies, and would tend to reduce the average distance migrated by women in this class compared with those migrating before marriage.

The scope of such detailed marriage registers for migration studies can be illustrated by the case of eighteenth-century Edinburgh. For all categories of women there was a widening of the migration field during the eighteenth century, in contrast with the contraction for apprenticeship migration, and with the trend for English towns at this period. Women

50 Scottish Record Society, Register of marriages of the city of Edinburgh (1926).
moving to Edinburgh before marriage, many of them probably as domestic servants, tended to come from further afield than apprentices. There was a clear difference in the migration fields of women moving to Edinburgh before and at marriage, the latter migrating over shorter distances on average. Many marriages in the latter group were probably generated by everyday contacts between the inhabitants of the city and its immediate hinterland.

There were marked changes in the pattern of female migration to Edinburgh during the eighteenth century. There was a steady increase in the numbers of women from England who moved to Edinburgh. In the first decade of the eighteenth century women migrating before marriage from English origins accounted for only 0.4 per cent of the total whose origins were recorded. By 1780-9 the figure had risen to 4.6 per cent. The most important origins were Northumberland (1.6 per cent) and London (1.2 per cent); the remainder of the origins were dispersed throughout England. This shows that growing contact with England after 1707 was generating population flows in both directions. Many of the girls moving to Edinburgh probably being the daughters of Scottish expatriates. Within Scotland the proportion of women migrating from the Lothians and Fife remained stable while migration from the Borders did not fall as drastically as for apprentices. This may have been due to the continuing high demand in Edinburgh for female domestic servants, while the industries of Tyneside would have attracted men rather than women. There was a fall in the proportion of female migrants from west-central Scotland. In relation to the growing population of this area this probably represents a significant relative decline. On the other hand the contribution of the Highlands increased dramatically. In 1700-9 only 1.2 per cent of girls migrating to Edinburgh before marriage came from the Highlands but this rose to 11.6 per cent by the 1780s. Edinburgh was a focal point for the hiring of Highland workers for the Lothian harvest.51 and it is likely that a proportion of Highland girls on temporary visits would have met and married partners in the capital. The Highlands may also have been a good source of cheap female servants. A similar, if scaled down, pattern is discernible for the small manufacturing centre of Kilmarnock in the mid-eighteenth century. Sixty-three per cent of female migrants before marriage came from within twenty-two kilometres of the burgh but fifteen per cent had travelled more than eighty kilometres including one or two individuals who had come from as far afield as Aberdeen. East Lothian and Ross-shire.52

Further work of this kind may reveal the pattern of movements into other Scottish towns, identifying local migration fields and their evolution through time.

52 GRO OPR 597.
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Even where urban marriage registers do not record pre-marriage migration, patterns of marriage distances, the distances between parishes of residence of brides and grooms at the time of marriage, are useful general indicators of mobility. They have the advantage of including people at all social levels and, as Scottish registers usually record the proclamation of banns rather than the marriage itself, they list brides moving out of a parish at marriage as well as those moving in. A study of marriage distances for the three East Lothian burghs of Haddington, Musselburgh and Prestonpans show a distinct tendency for the mean marriage distance to increase between the seventeenth and late eighteenth centuries. In the case of Prestonpans the average distance migrated at marriage almost trebled between the early seventeenth and late eighteenth centuries, probably as a result of the emancipation of the coal and salt workers who formed a substantial proportion of the population.

Although mean distances migrated at marriage increased significantly for all three towns, median distances did not change greatly indicating that patterns of marriage mobility for the bulk of the population did not change greatly while there was a significant increase in long-distance marriage contacts among a limited social group; generally speaking, the professional and middle classes. A study of levels of marriage endogamy in Kilmarnock, whose marriage register consistently gives occupational data for much of the eighteenth century, emphasises the contrasts which existed between different social groups. Among higher-status groups, like merchants and maltmen, with a smaller pool of potential partners available locally, around a third of marriages involved brides from outside the parish. By contrast the figure for a low-status occupation like a collier was only five per cent.

Overall the pattern of migration into Scottish towns during the seventeenth and eighteenth centuries matches that for contemporary England. There was a good deal of long-distance migration to Edinburgh which tended to increase during the later eighteenth century with a growing influx of Highlanders though, as with English towns during the seventeenth and eighteenth centuries, there was a contraction in the migration fields of some groups such as apprentices due to the rise of competing centres. Other Scottish towns tended to have more markedly regional patterns of recruitment.

52 GRO OPR 705, 709, 718. 53 Smout (1972): 168–70. 54 GRO OPR 597.
56 Continuity into the nineteenth century is shown by C.W.J. Withers, 'Highland migration' (1985): 295–318.
While migration to the towns was increasingly important in Scotland during early modern times, movements within the countryside were far more significant in total. The basic features of rural population mobility have been considered by Houston in a study based on testimonials, certificates of good moral conduct issued by kirk sessions. He showed that levels of rural population mobility were high, and that much of the movement was over short distances, a characteristic also identified in Lockhart's study of movement into planned villages. Much of the turnover was due to the frequent movement of farm servants, producing peaks of migration around the hiring times of Whitsunday and Martinmas. Tradesmen (many of whom may have been cottars) were also a mobile group with tenants being less migratory. Women were more mobile than men overall. Around three-quarters of the migrants travelled less than ten kilometres. There were indications of an increase in the average distances travelled from the seventeenth to the later eighteenth centuries, particularly into parishes containing or adjacent to towns, but the testimonials did not allow rates of mobility to be estimated. The parallels with patterns which have been demonstrated for contemporary England are striking. It is not clear though whether the turnover rates in Scottish communities were as high as in England or lower like in parts of France or Germany. More research at a local level is necessary to establish this. This section explores the background to the patterns established by Houston and others, highlighting some influences on the mobility of different social groups.

In the past, emphasis has been laid on the insecurity of Scottish tenants under systems of short leases or year-to-year agreements. If this did cause insecurity one might expect the tenantry to have been fairly mobile. This relationship has been suggested for Ireland though Cullen also stresses the importance of poverty and lack of resources in encouraging tenant mobility. Yet if any group in Scottish rural society should have been stable it should have been the one which actually farmed the land and, as in Ireland, one would expect the larger farmers to have been less mobile than the smaller ones.

Despite the prevalence of short leases in Scotland there is evidence that during the seventeenth century proprietors often had paternalistic attitudes towards tenancy, allowing families to continue in occupation from one generation to another. Tenants who could not meet their full


61 J.E. Handley, Scottish farming in the eighteenth century (1953): 120.


63 Ibid.
rents were often given considerable latitude. Eviction for non-payment of rent did occur but does not seem to have been particularly common. There is no case for assuming that short leases in themselves necessarily caused high levels of turnover among tenants.64

Tenants are the best recorded group in Scottish rural society in the seventeenth and eighteenth centuries as they figure prominently in estate papers. There is plenty of scope for detailed community studies using leases, accounts and rentals in conjunction with other sources such as testaments, kirk session records and parish registers.65 Tenant mobility on the estates of the Earls of Panmure in Angus has been studied in this way.66 There were two distinct groups of tenants, stayers and movers. Nearly a fifth of the tenants occupied the same holdings for twenty years or more; holdings often passed from father to son, or from a tenant to his widow and then to a son. On the other hand 37 per cent of the tenants appear in the estate records for five years or less. Some may have left the estate, some must have died. Others may have moved downwards to the ranks of the cottars.

Movements of tenants from farm to farm within the estate can also be detected from the rentals. Between 1660 and 1710 only 16 per cent moved in this way. Most moves were over very short distances, usually to a neighbouring farm: 76 per cent were under 5 km, 54 per cent under 3 km. The farm structures at Panmure and on many other Lowland estates often allowed tenants to alter the amount of land which they worked without migrating. On multiple-tenant farms a tenant could increase or decrease the size of his share. Another option was multiple leasing, taking two holdings on neighbouring farms. Such non-migratory adjustments formed the majority of changes in holding size. This may indicate a desire to minimise risk. Such changes involved expanding from a base of land whose qualities were known and working with familiar neighbours. A move to another farm might increase the risk of failure by requiring the tenant to work unfamiliar land in co-operation with new neighbours.

Further aspects of tenant mobility can be examined by comparing estate records with other sources. For the Panmure barony of Downie only 28 per cent of tenants entering holdings between 1670 and 1714 appeared in the baptism register at an earlier date. However, 40 per cent of tenants taking on larger holdings had been baptised in the parish against only 21 per cent of smallholders and 20 per cent of cottars. This

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suggests that tenants of larger holdings formed a more stable group on these estates, and that smaller tenants and cottars were more mobile.

Another aspect of tenant mobility is the turnover rates of holdings through time. One might expect that during major subsistence crises starving tenants would abandon their farms and take to the roads. This did occur under extreme conditions; in the interior of the North East during the later 1690s and perhaps more generally in 1623. If a crisis was less severe, however, it could slow down turnover. At Panmure there was a lower turnover of holdings during the later 1690s than in the years before. Under such circumstances there may have been nowhere else for the tenants to go. Proprietors and estate officers would have been unlikely to evict tenants who could not pay their rents when there was little chance of finding suitable replacements, or of recovering the arrears of the evicted farmers.

An interesting set of relationships which has yet to be explored concerns the links between mobility and inheritance strategies among the farming population. Given that tenants were effectively excluded from the land market, what strategies did they adopt for setting up their children and how did this affect mobility? At Panmure it was not uncommon for son to follow father in the same holding but another option was for a tenant to set up his son elsewhere on the estate. In one important respect this differed from the strategies practised by English yeomen. Without a peasant land market tenants had no control over the availability of land for setting up their children. The farm structure of an estate was determined by the proprietor and his administration and while there was some flexibility, excessive subdivision to accommodate the sons of tenants with limited resources does not appear to have been practised. Indeed, in the later seventeenth and early eighteenth centuries the trend was towards holding amalgamation, creating fewer large units.67 Wills suggest that while efforts were made to provide small portions for younger sons and daughters most of the value of the farm stock and often the holding itself went to one son, presumably the eldest in most cases.68 While some younger sons may have stayed at home and helped to work the family holding there is little evidence of this in the poll tax lists of the 1690s.69 Many tenants’ sons must have been unable to become established locally on a holding. Some may have stayed as cottars and tradesmen, others may have left to form part of the flow of migrants to the towns. The mobility of cottars may often have been

67 Whyte (1979): 137–43.
69 The poll tax returns for Aberdeenshire and Renfrewshire have been published: J. Stuart (ed.), List of pollable persons within the shire of Aberdeen (1844); D. Semple (ed.), Renfrewshire poll tax returns (Paisley, 1864).
linked with that of tenants. Leases frequently stipulated that when a tenant left his holding his cottars and subtenants should move with him. On the other hand cottars were also free agents; the large number of cottarages, the limited possessions and livestock of most cottars, and the flexibility provided by the trades which many of them practised, may have made mobility easier than for many tenants. Cottars are less well documented than tenants. At Panmure, however, the register of Monikie parish allows some Panmure cottars to be identified, and aspects of their mobility to be studied. From 1703 to 1714 the proportion of cottars moving within the barony (24 per cent) was higher than that of tenants (15 per cent). The cottars were not uniformly mobile though; there seem to have been two groups of mobile and stable men as with the tenants.

Lowland Scotland was similar to England in that a high proportion of young, single men and women in rural areas left home in their teens to work as farm and domestic servants in other households. Until more detailed local studies are undertaken it is unclear whether Scottish servants left home at similar ages to their English counterparts or were younger. The origins of this system in England go back to late medieval times at least. In Scotland farm servants were too numerous in the sixteenth century for this group not to have existed at an earlier date. Farm servants are also poorly documented: they do not appear in estate records or parish registers and, aside from cases of fornication in kirk session registers, they are more often referred to in general terms in the records of Justices of the Peace. Farm servants were common in Orkney, Shetland and the Hebrides in the seventeenth century and presumably must have existed in other parts of the Highlands but it is not clear whether systems of hiring and mobility in these areas were comparable with the Lowlands. They were more frequent in lowland arable areas than in the pastoral uplands of southern Scotland. In Lowland Scotland, farm servants normally hired themselves out for a year, as in England and, as Houston has shown, they commonly moved from one master to another, though usually over limited distances. This is directly comparable with Kussmaul's findings for English farm servants.

It is important to note, however, that by the later eighteenth century farm service was in decline over much of southern England, giving way to the use of day labourers, while the system was maintained in slightly modified forms in Scotland and northern England. The persistence of long-hire systems of labour in Scotland, with a change of employment

70 For a published example see C.S. Romanes, Melrose regality records, vol. 1 (1914):133.
71 Whyte & Whyte (1984a).
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normally occurring at the end of the contract, may have maintained rural population mobility at higher levels than in many parts of rural England remote from the attractions of the growing industrial centres.

Much less information is available concerning mobility within the Highlands. Emphasis has been placed on the marked cultural differences which existed between the Highlands and the Lowlands into the eighteenth century, and on the conservative and reactionary character of Highland society. The much discussed but little researched structure of clan society with its stress on kinship and inter-clan hostility does not appear conducive to geographical mobility, and might lead one to suppose that levels of mobility were low until the sometimes traumatic changes which followed the 1745 rebellion. On this basis the rise of large-scale temporary and permanent migration from the area (see below) can be interpreted as a late eighteenth-century phenomenon caused by the belated integration of this region into the capitalist economy of the rest of Britain.

For the Highlands, the poor quality or total lack of many of the sources which shed light on population mobility in the Lowlands prior to the later eighteenth century makes the testing of these assumptions difficult. It has not, however, been demonstrated convincingly that levels of mobility were significantly lower in the Highlands than the Lowlands between the sixteenth and mid-eighteenth centuries and there are certainly pointers which suggest that mobility there was greater than has sometimes been supposed. Regular contacts between the West Highlands and Ulster, and trade with the Lowlands are important features of the seventeenth century.

Moreover, Lenman has pointed out that inter-clan violence diminished markedly during the later seventeenth and early eighteenth centuries and that there was less homogeneity of surnames among the lower levels of clan society than has often been supposed, suggesting that Highland society was not as tightly compartmentalised as has sometimes been portrayed and that a good deal of mobility did occur. Macpherson’s study of marriage patterns in the parish of Laggan from late-medieval times indicated that persistent directional patterns of marriage contact existed. There was relatively little contact southwards with Perthshire, or the south-west Highlands, to the east or north of the Great Glen, and none into the Lowlands. Instead, contacts were channelled down the Spey valley. This pattern remained stable until the early nineteenth century and Macpherson suggested that the directional focus may have been tied to economic linkages with the Moray Firth lowlands such as the taking in of

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80 Ibid., 7, 26.
lowland cattle to the summer shielings and the purchase of grain from coastal arable areas.

Studies of population mobility in England have indicated that the marriage horizons of lower status groups such as farm labourers were more limited than those of wealthier farmers. Such contrasts existed in Scotland too. In Monikie parish in Angus, tenants were far more likely to choose partners from outside their parish of residence than were cottars.\textsuperscript{82} With tenants, the local pool of prospective brides of similar status would have been more limited while the importance of a girl’s dowry in allowing the married couple to set up on a holding of their own may also have made the choice of partner a matter requiring more care.

\textbf{POVERTY, VAGRANCY AND SUBSISTENCE MIGRATION}

Most visitors to Scotland in the sixteenth and seventeenth centuries who recorded their impression commented on the country’s poverty.\textsuperscript{83} A notable feature is the persistence of major subsistence crises. Southern England was free of such crises from the end of the sixteenth century, and the north from the 1620s. Scotland experienced a national crisis in the later 1690s and the Highlands continued to suffer periodic, albeit attenuated, famine throughout the eighteenth century, notably in 1782.\textsuperscript{84} It is probable that as in France a combination of small holdings, inefficient farming systems and the lack of integrated national markets in basic foodstuffs combined in Scotland with more marginal climatic conditions for cereal cultivation, helped to put the population at risk. The reserves of many farmers were comparatively slender, suggesting that smaller tenants must have lived their lives on the verge of poverty, terribly vulnerable to the effects of even a single poor harvest.\textsuperscript{85}

If poor relief had been as generous as in England poverty and potential starvation might have been reduced but the relief provided to resident poor by most kirk sessions was designed as a supplement rather than a full support.\textsuperscript{86} Mitchison’s study of East Lothian parishes during the 1690s shows that while some kirk sessions distributed their resources to maximum effect others restricted expenditure at the expense of letting their resident poor starve.\textsuperscript{87} In such circumstances it is not surprising that during major subsistence crises people took to the roads in large numbers. One commentator estimated that the numbers of begging poor doubled to 200,000 during the later 1690s.\textsuperscript{88} The figures are dubious but the scale of

\textsuperscript{82} Whyte & Whyte (1984b).
\textsuperscript{83} P.H. Brown (ed.), Early travellers in Scotland (1891).
\textsuperscript{84} Flinn (1977): 234–5.
\textsuperscript{87} Mitchison (1974): 76–80.
\textsuperscript{88} Flinn (1977): 170.
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increase may be realistic. A severe crisis could set even substantial tenants on the roads. The result was dislocation in the countryside and an influx of poor into the towns. There are hints of this for Edinburgh in 1623, and more evidence from the 1690s when the burgh council set up a relief camp for vagrants in the Greyfriars churchyard.\(^89\) Smaller towns experienced similar problems.\(^90\) Superimposed on this was a general drift of the poor and unemployed to the towns which was probably most evident during periods of population pressure – the late sixteenth and early seventeenth century for instance – although foreign wars in the later seventeenth century may also have caused trade slumps forcing industrial workers on to the streets.\(^91\) There are fewer indications of large-scale population movements of this kind in the Lowlands during the eighteenth century. Improvements in agricultural productivity, more effective administration of poor relief, and measures by landlords during years of shortage may have helped. Vagrants from the Highlands still filtered into the Lowlands though after years of dearth like 1740 and 1782.\(^92\)

There was also a more perennial problem of vagrancy during the sixteenth and seventeenth centuries. As in Tudor England the authorities seemed obsessed with the problems of vagrancy and poverty, the former being viewed rather more seriously.\(^93\) The Scottish legislation echoes that of England in considering the able-bodied poor who were capable of work as potential or actual vagabonds, a threat to social order, while reserving charity for the old and infirm. It is unlikely that as in England a rise of population, accompanied in the later sixteenth century by substantial inflation, lay behind the problem of vagrancy. Some of the underlying causes of poverty and vagrancy in England, such as depopulation due to enclosure, may not have applied to Scotland. Others, such as the effects of industrial slumps may well have occurred in Scotland but have yet to be pinpointed. In England poverty diminished as agricultural productivity rose and population growth slackened in the later seventeenth century while more effective poor relief and controls on settlement helped to reduce vagrancy. It is not clear to what extent emigration and demographic checks such as the famine of 1623 and the epidemics of the 1640s improved the balance of population to resources in Scotland but vagrancy appears to have been growing again in the 1680s and early 1690s.\(^94\) and despite the fall in population at the end of the century it continued to be a problem.

Beier has shown that in England there was a considerable difference between the official view of vagrants as a major threat to the state and

\(^{89}\) Ibid., 119–20; Armet (1962):208–10, 213, 228.  
\(^{90}\) Peebles burgh records (1910):162.  
\(^{92}\) Ibid., 233.  
\(^{93}\) The legislation relating to poverty and vagrancy is reviewed in Cage (1981).  
I.D. Whyte

reality. The same was probably true in Scotland but there may have been more reason for the authorities there, and the population in general, to fear vagrants. In a country where the rural population was dispersed in small clusters and single dwellings, sorning - begging with menaces - could threaten small outlying communities. With so much sparsely settled upland and moorland, beggars could easily move around and congregate. Despite the popular image, it was unusual for vagrants in England to travel in large groups. In Scotland this may have been more common. During subsistence crises whole families were on the road but at other times bands of beggars are recorded. Sometimes they could terrrise a whole district but such celebrated examples as the gipsy leader James Macpherson who was hanged in Banff in 1700 were probably rare.

A detailed study of kirk session records would provide a clearer picture of vagrancy in Scotland. Those for Monikie parish show that 20 per cent of all payments between 1660 and 1710 were to groups of vagrants. Of payments to individuals, 73 per cent were to men and 27 per cent to women, proportions which are comparable with the sex ratios of English vagrants. The kirk session register sometimes suggests why people were on the road. The most common reason was blindness or physical deformity, accounting for 40 per cent of payments to individuals where details were given, with sickness accounting for another 5 per cent. The next largest group (11 per cent) was those whose homes or possessions had been destroyed by fire. Some payments were made to people whose distress was clearly only temporary: shipwrecked sailors, discharged soldiers and victims of robbery. Such people may only have required assistance to return home. Despite the claims which have sometimes been made against rack renting, there were few bankrupt tenants. The remaining payments went to people whose designations indicate that they had formerly had some social status. Men designated as 'Mr', or 'gentleman', and women styled 'gentlewoman' made up 19 per cent of individual payments: former schoolmasters, ministers, doctors, merchants and burgesses another 9 per cent. Perhaps the decline in the fortunes of such people prompted particular generosity so that they are over-represented: perhaps there were some plausible rogues on the roads too, but a testament would normally have been required as proof of such status.

Beier has shown that the broad patterns of movement of vagrants in England were not random, but consisted of distinct directional flows from upland to lowland and from west to east. The lack of data on origins of Scottish vagrants makes direct comparison difficult but there was certainly

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a drift of vagrants from the Highlands to the Lowlands in the eighteenth century and probably earlier.\textsuperscript{100} Beier noted, however, that many vagrants operated within a much more limited radius of their parish of origin.\textsuperscript{101} In a similar way some of the vagrant poor recorded in Monikie were moving around a restricted area, possibly through a regular circuit of parishes.\textsuperscript{102} For example, William Bouack, sometime schoolmaster at Forfar, appeared for several consecutive years, always at the same season, payments made to him being grouped between September and early October. William Lyell, variously described as ‘poor man’, and ‘stranger’ appeared once every summer for several years, generally in July. It is possible that in Scotland at this time movements of vagrants were more tied to the countryside where food of various kinds could have been more easily obtained than in the towns. The patterns described in Monikie parish may have been linked to seasonal rhythms in the market for casual labour. Where kirk session records are well kept for groups of contiguous parishes it may be possible to examine these suggestions in more detail.

\textbf{THE RISE OF TEMPORARY MIGRATION}

A feature of population mobility in Scotland during the eighteenth century was the rise of large-scale seasonal migration.\textsuperscript{103} This has direct parallels with the development of movements of labour from upland to lowland areas in England and Ireland, as well as on the continent.\textsuperscript{104} The seasonal migration of labour to help with the lowland harvest can be detected in the seventeenth century although the evidence is scanty.\textsuperscript{105} The movement of workers from Tweeddale and other upland areas of the eastern Borders to the harvest in the Merse and the Lothians is recorded while there was also a movement of workers from the burghs to the surrounding countryside at harvest time.\textsuperscript{106} During the eighteenth century, however, temporary migration from the Highlands became prominent. There are indications that some Highlanders were migrating to the Lowlands for the harvest in the late seventeenth century: some who sought temporary work in the Lowlands during the later 1690s refused to return home because conditions there were so bad.\textsuperscript{107} Large-scale seasonal migration was, however, a phenomenon of the later eighteenth century.

The growing use of migrant labour in the Lowlands may have been linked to agricultural reorganisation with a gradual removal of cottars and

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greater emphasis on trimming the full-time labour force on farms. By the end of the century seasonal migration was characteristic not so much of those parts of the Highlands which were adjacent to the Lowlands, where permanent out-migration was more common, but of the far north and west. In these areas steady population growth, a need for cash to meet rising rents, and the lack of alternative sources of employment at home provided the incentives which drove many Highland girls south to work in the harvest fields.

**CONCLUSION**

Population mobility is a recurrent theme in the parish descriptions of the Old Statistical Account which were written during the 1790s. Superficially, much of the movement recorded there seems linked to recent changes in the economy; farm amalgamation and the reduction of cottar holdings were causing movement out of some rural parishes, while the creation of planned estate villages, often with concentrations of textile manufacture, were attracting people to others. The major manufacturing districts were drawing people from purely agricultural areas. However, this chapter has shown that there was comparatively little that was new in these patterns, except perhaps their scale. Some types of population mobility - subsistence migration and vagrancy - declined from the sixteenth century to the eighteenth, some such as seasonal migration increased. Others, such as urban in-migration and movement within the countryside were a constant theme: if they increased in the later eighteenth century there had nevertheless been considerable mobility in earlier times. The patterns which have been identified emphasise how closely Scotland's experience corresponded with England's and the rest of Western Europe's. Although quantitative data from the analysis of particular communities will be required to confirm the picture so far suggests that population turnover in Scotland was probably closer to the high levels recorded in some English communities than the lower levels which have been found in France and Germany.

There is a need, however, for further work to establish some of the differences between Scotland's patterns of population mobility and those of her neighbours. The scale and nature of vagrancy and the characteristics of mobility in Highland society before the later eighteenth century would be especially worthy of further investigation, in particular whether the structure and operation of the clan system acted as a check to population mobility. Much of this chapter has considered mobility at a generalised level. There is considerable scope for further detailed work particularly local studies utilising a range of complementary sources. It is only through such local studies that the general patterns will be substantiated and regional and smaller-scale variations detected.

INTRODUCTION.

The origins of the Industrial Revolution in England have long been debated but Scotland is often treated as only marginally important in the industrialization of Britain. Scotland's economic development in early-modern times remains in many ways a puzzle. An impoverished country with essentially medieval trading patterns and an underdeveloped economy at the end of the seventeenth century, Scotland rapidly caught up with her southern neighbour in the eighteenth century. (1) Scotland's industrialization has the appearance of an 'economic miracle' compared with progress south of the Border. Traditionally, Scotland's success has been attributed mainly to external influences, particularly the Union of 1707 giving access to expanding English domestic and colonial markets. (2) To explain everything in terms of the Union is, however, inadequate, as Devine has suggested. (3) Much of Scotland's eighteenth-century development was shaped by indigenous influences but the nature of these has been insufficiently explored.

Scotland's case is not only intrinsically interesting but comparison with England and other European countries offers the possibility of new
Insights into the causes and mechanisms of industrialisation more generally. Although proto-industrialisation theory has been applied to Ireland, there has been little theoretical work on the development of pre-factory industry in Scotland. Given the recent interest in proto-industrialisation within Western Europe and the lack of research on the origins of Scottish industrial development this chapter attempts to analyse some of the distinctive characteristics of Scottish industry in the seventeenth and eighteenth centuries in the hope of generating some new questions about Scottish social and economic development and their place within the British Industrial Revolution. The theoretical yardstick of this analysis is found in hypotheses raised by the proto-industrialisation literature. As industrialization in Scotland was preceded by widespread rural manufacturing, particularly of textiles for distant as well as local markets, the proto-industrialisation model offers a useful framework within which to explore the country's rapid economic progress in the eighteenth century. The theoretical approaches associated with the concept of proto-industrialization are useful in highlighting many important questions such as those concerning the links between regional specialization in industry and agriculture, the relationships between agrarian structures, landownership and household production, and the importance of gender divisions in both agricultural and industrial labour.

The Regional Distribution of Rural Textile Production in Early-Modern Scotland.

A good deal of effort has been given to defining the environmental, economic and social criteria which characterised regions where large-scale
rural industry developed in the past, though it must be appreciated that such criteria relate to idealised situations which are not likely to exist in all or even most proto-industrial regions. (5) Proto-industrialization is thought to have developed mainly in upland areas among peasant smallholders practising a pastoral economy. Such people developed industrial activities to supplement inadequate incomes from marginal farming. Typical proto-industrial regions were characterised by dispersed settlement where controls generated by open field systems, nucleated villages and tightly-organised manors or estates were weak or absent. The lack of marked seasonal peaks of labour in pastoral farming strengthened the commitment to industrial production as did the individuality generated by geographical isolation. The large reserves of wasteland in such areas could be encroached on piecemeal by squatters producing a pattern of small holdings which in turn encouraged the taking up of by-occupations in industry. There are problems in trying to apply this model situation too rigidly, as Coleman has pointed out. (6) The idea only begins to fits England if the definition of 'upland' is broadened to include lowland wood-pasture areas. Most early advocates of proto-industrialization agreed that areas of commercial cereal production with extensive open field systems and strong landlord controls were less favourable to the development of large-scale rural industry. In such areas neither the pattern of landholding structures nor the marked seasonal demand for labour encouraged proto-industrialization as opposed to subsidiary by-employments, as Snell has indicated. (7) Gullickson's work on the Pays de Caux has, however, suggested that the link between proto-industrialization and unfertile areas of subsistence farming has been overstressed in the past and that other influences such as landlessness and lack of employment in agriculture for
women could generate proto-industrialization in areas of large-scale cereal production. (8)

How did the distribution of rural textile production in Scotland during the seventeenth and eighteenth centuries compare with the model? To some extent this depends on the scale at which the problem is approached. At a European level Scotland was a peripheral, marginal, largely upland country with a mainly pastoral economy. Scotland's settlement pattern was one of dispersed farmsteads, cottages and hamlet clusters with few nucleated villages. With such a broad perspective the development of rural industry anywhere in Scotland could be reconciled with the model.

But proto-industrialization is a regional concept and must stand or fall by its ability to explain developments at this scale. If one examines Scotland more closely, discrepancies begin to appear. To appreciate this it is necessary to make some regional division of Scottish agriculture in the early-modern period. The definition of 'farming regions' in early-modern England, and the industrial activities associated with them, has reached a high level of refinement. (9) The same cannot be said for Scotland. The concept of farming regions may not even be strictly applicable. There are indications that there were less marked regional variations within Scotland in settlement patterns, farm structures, field systems and types of husbandry as well as social structures and inheritance patterns than there were in contemporary England or France. (10) Contrasts between the Gaelic Highlands and the anglicised Lowlands were important at a macro scale, as were differences between neighbouring estates at a local level. Marked regional variations at an intermediate scale are harder to identify.
Within Lowland Scotland there was nothing comparable to the contrast between champion and wood-pasture which occurred in lowland England. (11) However, much of the eastern lowlands from the Moray Firth to the Berwickshire Merse, and some parts of the Western Lowlands such as the lower Clyde valley and central Ayrshire, were oriented towards cereal production. Many of these areas were substantial exporters of grain in the later seventeenth century. Other parts of the Lowlands, even northern areas like Caithness and Orkney, also produced enough grain to be periodic exporters. On the other hand the Southern Uplands were pastorally oriented with an emphasis on sheep rearing in the eastern Borders and cattle raising in the south-west. Even in the Southern Uplands arable farming was important in the broader dales and all livestock farms except the most high-lying produced some grain for subsistence purposes until well into the eighteenth century. The Highlands too has an economy based on pastoral farming with a subsistence arable element. (12)

Within this broad framework where did rural industry occur? On the basis of the traditional proto-industrialization model one would look to the Southern Uplands and the Highlands for concentrations of industrial activity analogous to the Pennines or Alpine areas. Unfortunately, whilst the physical environment of these areas might have favoured such developments, the social and cultural milieu did not. The Borders had a sheep-rearing tradition whose origins lay in medieval monastic farming. (13) However, while a certain amount of woollen cloth was exported from the region (Map 1.), the limited scale of activity in the seventeenth and early eighteenth centuries does not indicate large-scale production for distant markets. (14) It was only later in the eighteenth century, with a
reorganisation of farm structures linked to the development of more commercial livestock farming, that labour was released to allow the development of commercial woollen production. (15) The Highlands were even less attractive for industrial development, being isolated culturally and linguistically from the rest of Scotland. (16) Much of the area was remote from urban centres and, even after the pacification following the 1745 rebellion, remained unattractive to merchant capital. As will be discussed below, parts of the southern and eastern Highlands did become linked with Lowland textile production through the commercial spinning of linen yarn, but the remaining textile processes, particularly weaving, failed to gain a foothold there.

Map 1. shows the distribution of concentrations of textile production in Scotland during the late seventeenth and early eighteenth centuries. Woollen and linen cloth were significant exports in the sixteenth century but little is known of the distribution or scale of production outside the burghs at this time. (17) By the start of the eighteenth century, although woollens and linen were being produced throughout Scotland, commercial production was markedly concentrated. Evidence for the stamping of linen after 1727 shows that the industry was located principally in five counties: Forfarshire, lowland Perthshire and Fife in the east, Lanarkshire and Renfrewshire in the west. (18) The map emphasises the importance of the larger burghs as centres for financing, organising and marketing rural textiles. The counties which specialised in linen production contained, or were adjacent to, the five largest towns as well as many second-rank burghs.
The woollen industry was less buoyant than linen manufacture in the later seventeenth century and suffered from English competition after the Union. (19) There were concentrations of activity in Aberdeenshire, including the knitting of hosiery as well as the weaving of coarse plaiding, and in the Borders. Elsewhere, as with linen manufacture, production was closely tied to the towns and their immediate hinterlands.

This concentration partly reflects the strength of the monopolies of the major Scottish burghs even in the seventeenth century. In contrast to England, where the medieval structure of monopolies and restrictive guild practices was rapidly disappearing, Scotland's larger medieval towns retained considerable control over the country's trade and manufacturing. The ancient urban foundations, known as royal burghs, held their charters direct from the crown. They were mainly medieval foundations and included all the larger towns. Their collective interests were united and promoted by the Convention of Royal Burghs, an organisation which had considerable influence with the central government until after the Restoration. The royal burghs contributed substantially to crown revenues through taxation and in turn were allowed to retain their extensive privileges. These included a monopoly on foreign trade within defined hinterlands or 'liberties' which covered the entire country. In theory only burgesses of royal burghs were allowed to buy and sell within these areas. Trading, other than direct barter-type exchanges between producer and consumer, was supposedly confined to the market places of the royal burghs. The craft guilds of the royal burghs were still active and vigorous and were able to exert considerable control over rural manufacturing. (20)
A new type of centre, burghs of barony, holding their charters from larger landowners rather than the crown, had multiplied throughout Lowland Scotland in the sixteenth and seventeenth centuries. These were, however, only allowed to produce goods for the home market until 1672. In that year the royal burgh monopolies, which were increasingly becoming viewed as restrictive by the landowning element which dominated the Scottish Parliament, were abolished. However, the merchants and craftsmen of the royal burghs had the wealth, expertise and contacts which ensured that manufacturing continued to be focused on these towns until well into the eighteenth century. Although rural manufacturing for local consumption was ubiquitous, the late survival of this system of monopolies probably ensured that commercial production of textiles and many other commodities was more urban in character in Scotland than in most other west European countries. This is emphasised by the urban location of various textile 'manufactories' for high quality cloth which were established during the late seventeenth and early eighteenth centuries (Map 1.). Although landed capital played a part in setting some of them up they were nevertheless tied to urban locations where entrepreneurship and skilled labour were concentrated.

Maps 2. and 3. show the distribution of commercial linen and woollen manufacture in the 1790s, the period when rural textile production was at its peak before the start of large-scale concentration in factories. The data are derived from the Old Statistical Account, a series of parish descriptions by local ministers. (21) The descriptions are variable in quality and some are too brief to provide information on manufacture but overall they give a fairly detailed picture of the distribution and character of the textile industries and of male proto-industrialization.
Map 2. shows that the weaving of linen was still concentrated in the same areas as a century earlier. The parishes shown are those for which linen is recorded as being produced in some quantity for distant markets. A notable feature is the spread of the spinning of linen yarn to remote districts like Highland Perthshire, the Moray Firth, Ross and even Orkney. The small-scale subsistence character of agriculture in many of these Highland and northern areas may have left women freer to take up commercial yarn spinning once urban manufacturers had started to penetrate the region. In these parishes there was no significant commercial weaving of linen but a high proportion of the women produced yarn for sale. Sometimes they grew their own flax but mostly they obtained their raw materials from urban manufacturers, often at a considerable distance, or their local agents. The manufacture of woollen cloth was much less important than linen by the end of the eighteenth century and had a scattered distribution with concentrations in south Ayrshire, the eastern Borders between Galashiels and Hawick, and at the foot of the Ochils. Allied to this was the distribution of stocking knitting. In southern Scotland this was mainly urban-based but in the north there were major concentrations in two rural areas: Aberdeenshire and Orkney and Shetland.

If we focus on linen, Scotland's premier manufacture for much of the eighteenth century, its production was mainly located in arable rather than pastoral areas. In Perthshire commercial production did not begin to penetrate the upland districts until the middle of the century and even this was confined to spinning. (22) Here we have an apparent paradox. In the proto-industrialization model such areas appear unsuitable for the development of rural industry. Moreover, while the settlement pattern
throughout Scotland was predominantly dispersed, arable farming was nevertheless tied to an open-field system, infield-outfield, which required co-operation between neighbours at a township level. (23) Such communal controls, supposedly unfavourable to the development of large-scale rural industry, were more significant in the arable lowlands than in upland pastoral districts. The manorial courts which regulated activities within English open-field systems had their counterparts in Scottish baron courts. (24) In Scotland landowners had a high degree of control over the rural population compared with England, while the kirk sessions controlled population mobility through the issue of testimonials. (25) Such controls are likely to have been more effective in lowland areas where estates and parishes were smaller and the rural population was more closely supervised by landlords, estate administrators and kirk session elders.

One possible reason why hill areas like the Southern Uplands did not have large concentrations of industrial activity like parts of the Pennines was the way in which much upland rough pasture was held. In England hill pastures were grazed in common by surrounding communities but the land was generally in single ownership. This encouraged the small-scale intake of land by squatters who could eventually be brought before the manorial court and charged rents for their new tenements. (26) In Scotland, however, much hill pasture was held as commonty. Commonties were owned jointly by two or more proprietors. Unauthorised squatting on such land was an infringement of the shared property rights of the various landowners. These rights could remain effective only if the land was preserved as stinted pasture. Taking in a portion of commonty and converting it to arable was generally opposed in the interests of all the landowners concerned. Despite their potential
for colonisation commonties were effectively tied up as rough pasture and could not be converted to arable without a division by general agreement. (27) Such agreements were made only occasionally during the seventeenth century. (28) In 1695 the Scottish Parliament passed an act simplifying divisions where unanimous agreement could not be reached, but it was only later in the eighteenth century, when the economic advantages were more manifest, that many divisions were undertaken.

The bringing into cultivation of new land by establishing shallholdings at the fringes of the existing improved area was more characteristic of areas like Aberdeenshire in the period of improvement from the later eighteenth century. (29) But where this was done it was generally to create a reservoir of part-time labour for the large farms rather than to encourage rural industry. In addition, population pressure, encouraging the small-scale intake of marginal land, was lacking in Scotland in the century before the 1750s. Periodic subsistence crises in the Lowlands until the late 1690s and in the Highlands into the eighteenth century, combined with high levels of emigration, prevented a build up of population which might have encouraged such land to be taken into cultivation. (30)

One part of Scotland had the classic preconditions for the development of large-scale textile production during the later eighteenth century; the northern and western Highlands. Here a rapid build up of population, partly a result of a lower age of first marriage than in the rest of Scotland (31), progressive subdivision of already small holdings, and the adoption of the potato occurred under conditions of bare subsistence. (32) The small
sizes of the holdings - whether on the old joint farms or in the new crofting townships - forced people to take up activities outside agriculture to make even a precarious living. Yet large-scale textile manufacture did not develop. The options which were tried included kelp burning, fishing and seasonal migration to the Lowlands, but few Highland landowners seem to have seriously considered textiles. Attempts to establish centres for weaving at places like Lochbroom, Lochcarron and Glenmoriston were unsuccessful. (33) Only at the end of the nineteenth century did weaving of Harris tweed develop, mainly in the Outer Hebrides, as a cottage industry in combination with crofting agriculture. The north west Highlands and Islands have many parallels with Ireland, where large-scale linen manufacture was established successfully under not dissimilar circumstances. In the Highlands, however, textiles failed to provide a solution to the area's problems partly because of lack of skill among the workforce and the sheer distance from urban markets and urban capital. Even in the southern and eastern Highlands, where attempts to develop textile industries were made, success was limited. Here, too, lack of skill in weaving was blamed. At a time when quality control was becoming increasingly important, even for coarser linen, it seems to have been impossible to provide adequate instruction and supervision to weavers in Highland areas. In addition, the remoteness of the north west Highlands from urban markets, and its far-flung, fragmented geography would have been major disincentives to the development of proto-industrialization. (34) This restricted weaving to Lowland areas within easy reach of the towns.

It is clear then that in the seventeenth and eighteenth centuries rural textile manufacture in Scotland did not correspond closely to the
distribution of upland, or even lowland pastoral areas. Some of the reasons for this have already been mentioned in passing but the phenomenon is more fully explained if we examine the structure of Scottish rural society. As an introduction to this theme it is useful to consider to what extent Scotland's demographic experience at this period fits the model.

**POPULATION PATTERNS AND RURAL INDUSTRY.**

Proto-industrialization stresses the demographic impact of the development of large-scale rural industry. (35) As a result of the rise of industry as an alternative source of employment to agriculture the inhabitants of areas of rural manufacture became increasingly divorced from agriculture and the controls which the limitations of environmental resources and agricultural technology placed on population levels. It became unnecessary to postpone marriage and setting up an independent household until land or capital had been inherited or built up, as income from industrial work allowed financial independence at an earlier age. This, it is argued, encouraged a fall in the age of first marriage and larger average completed family sizes producing substantial increases in population compared with areas which concentrated on agriculture. In-migration to areas where it was possible to clear land from the waste and combine small-scale agriculture with domestic industry has sometimes been accorded a limited role by exponents of proto-industrialization (36) although some earlier studies have considered that in-migration was a significant factor in causing population growth in such areas. (37)
How well do regional demographic trends in Scotland during the seventeenth and eighteenth centuries fit this model? Some of the ministers who contributed to the Old Statistical Account suggested that the growth of the textile industries, especially linen manufacture, did have demographic and social effects similar to the ones postulated in the model. The high wages which could be obtained from weaving and spinning allowed young people to become independent and marry earlier than in purely agricultural communities, largely because they were able to by-pass the period of farm or domestic service which a high proportion of young people in agricultural areas underwent. The income from spinning, knitting and especially the embroidering of muslins discouraged young girls from going into service, allowing them either to remain at home and contribute to the family's income or to set up house on their own. Lower age at first marriage was specifically linked with larger families and an increase of population in some parishes. (38) For instance, the minister of the parish of Kettle in Fife wrote that "the looms find employment for women and children; and hence, a family being advantageous, the men marry early; and hence one of the principal causes of the increased population." (39) It should be stressed that until more detailed local studies of communities are undertaken there are no clear indications of how age at first marriage and completed family size varied between rural communities with or without industry. Moreover, the evidence for high levels of population mobility in Scotland in the late eighteenth century (40) suggests that in-migration is likely to have been as important as increased fertility in causing population growth in the linen manufacturing areas; but this still remains to be demonstrated.
Some indications of the extent to which rural textile manufacture encouraged population growth can be gained by comparing population figures from the Old Statistical Account of the 1790s with those from a census conducted by parish clergy in 1755 (41). In Perthshire, Forfarshire and Kincardineshire only 64 per cent of linen-weaving parishes increased their populations between 1755 and the 1790s. The average rate of growth over the period was five per cent. In Fife too 64 per cent of textile manufacturing parishes had increased their population at an average rate of eight per cent. In Ayrshire, Lanarkshire and Renfrewshire the figures were 72 percent and 27 per cent respectively. The experience of parishes which had only commercial spinning or knitting without any significant weaving was very different. Of the purely spinning parishes north of the Tay 65 per cent were in decline (at an average rate of five per cent). 81 per cent of the stocking-knitting parishes of Aberdeenshire had experienced a fall in population at an average rate of eight per cent.

It is impossible, however, with the current state of knowledge to isolate the impact of textile manufacture on population from a variety of other influences which were encouraging growth in parts of the rural Lowlands. The population of Scotland increased by 23 per cent between 1755 and the 1790s but large areas of the Southern Uplands lost population absolutely as did many lowland parishes in eastern and north-eastern Scotland. The other main area of absolute decline was the southern and eastern Highlands. The parishes with the highest growth rates were mainly urban and suburban, the populations sometimes doubling or trebling, but some rural parishes in the main textile-producing areas experienced increases in population well above the national average. On the other hand
some weaving parishes were clearly losing population relatively and even absolutely to nearby towns, while net growth also occurred in some rural areas without the benefit of large-scale textile manufacture: the lowland parishes of Dumfries-shire and Galloway for example. At a local level activities such as the factory spinning of cotton, bleachfields, coal mining and fishing could encourage population growth independent of textile weaving. Again, detailed local studies are required to explain the high degree of variation in patterns of population change at this time.

Did proto-industrialization in Scotland bring poverty and misery to the manufacturing population? All the evidence indicates that by the later eighteenth century the demand for textiles was sufficiently great to give a substantial proportion of weavers a higher level of income than other artisans or even many middling farmers. (42) Murray has, however, cautioned against the uncritical acceptance of a late-eighteenth-century 'golden age' before the days of power-loom weaving. (43) There were marked differences in income depending on the type and quality of the cloth woven, while periodic trading slumps could cause much hardship. (44) Female textile workers in otherwise agricultural areas, whether spinners of knitters, seem to have been particularly vulnerable in the later eighteenth century. As their incomes became more vital to the economies of their families they were open to exploitation as well as to the effects of changes in the demand for their products. Following the bad harvest of 1782 the Aberdeenshire stocking knitters were forced to redouble their efforts in order to maintain family incomes as a slump in demand for stockings resulted in a fall in prices. (45) Competition from frame knitting and from overseas producers was also helping to drive down prices, forcing many of them to
change to spinning linen yarn. (46) During the seventeenth century, as well as trade slumps caused by foreign wars interfering with overseas markets, subsistence crises also cut home demand for industrial products. The effects of such fluctuations on rural industrial workers have yet to be studied.

The Old Statistical Account paints a generally rosy picture of the lifestyles of weavers in the late eighteenth century but some ministers also stressed the negative side: the generally poorer health of men and women who worked mainly indoors in conditions which were sometimes damp, poorly ventilated and badly lit. (47) We must remember the authors' prejudices though. The picture drawn by some of the ministers of the virtues of agricultural life is too arcadian to ring true while their descriptions of the ill health, vice and moral degradation which, for them, was an inevitable accompaniment of high wages in the textile industries is also likely to be overdrawn.

In some respects then Scotland's demographic patterns fit the proto-industrialization model. In others they do not. Are there any aspects of Scotland's rural social and economic structures which might help to explain the apparent anomalies as well as highlighting the underlying causes of the very specific geographical distribution of textile manufacture described earlier in this chapter?

RURAL INDUSTRY AND RURAL SOCIAL STRUCTURE.
In the traditional proto-industrialization model the stereotype rural industrial worker is a peasant farmer living under marginal conditions in an upland pastoral area, working a holding too small to provide adequate support for himself and his family. He engaged in rural industry using his own labour and that of his family to supplement his household's income. How true was this for Scotland? To answer this question we need to know more about how textile production fitted into the agricultural economy of particular regions and how landholding and gender division of labour on the land influenced the possibilities of rural manufacturing, especially with the increasing commercialisation of agriculture and the expansion of textile production during the course of the eighteenth century.

If we start by considering the late seventeenth and early eighteenth centuries, the indications are that the spinning of woollen and linen yarn was done throughout the country by a high proportion of adult and young women in the tenant class and below. In the 1780s it was estimated that some 80 per cent of the female population of Scotland did some spinning. (48) This proportion had probably not changed materially from earlier decades. Spinning would have been done by the wives of tenant farmers, by their daughters and living-in female farm servants, by the wives of cottars, as well as by widows and unmarried women. Spinning for non-local consumption was more concentrated in its distribution, however, being centred in the main weaving areas (Map 1). Weaving had a more limited base both in the numbers employed and the social groups from which weavers were drawn. Within the rural Lowlands it is probable that tenant farmers with larger holdings were employed more or less full-time in agriculture. Most of the weavers were cottars, men who sublet small shares of arable land
with attached grazing rights from the tenant farmers and in return provided them with labour to help cultivate their holdings. The blanket term 'cottar' hides many gradations and regional distinctions. In some districts, such as the Lothians, married cottars were employed as ploughmen by the tenants receiving land, grazing and even a small fee in return. (49) Details of the employment of such men sometimes specify that the cottar's wife was to spin as part of the contract but not that the man was to weave. These ploughmen were probably too fully occupied in agriculture to have had much time to spare for weaving. Other cottars supplied labour on a less regular basis, in some cases principally during the main peaks of the agricultural year. Such men had more scope for engaging in weaving. This is sometimes suggested in the poll tax records of the 1690s by the dual designation 'cottar and weaver'. (50)

Proto-industrialization emphasises the tendency for holdings to be small in potential rural industrial regions and for them to be further reduced once large-scale industry had become established through partible inheritance. Most of the land in Scotland was held by substantial landowners. Owner occupiers, peasant proprietors, formed a limited group in most areas. These 'bonnet lairds' were more common in parts of the western Lowlands but even there they did not dominate rural society and their numbers diminished from the seventeenth century to the eighteenth as they were engrossed by the larger estates. (51) Partible inheritance of land by small owner occupiers can be eliminated as a significant influence behind the rise of rural industry in Scotland. It is more appropriate to consider temporal and geographical variations in the sizes of holdings occupied by tenants, the main group which worked the land. A rise in the rural
population might, in theory, have led to the subdivision of tenanted holdings beyond subsistence level, encouraging people to turn to textile production. There is, however, no evidence for this during the seventeenth and early eighteenth centuries. As a result of the epidemics of the 1640s, famine in the 1690s, and substantial emigration throughout the seventeenth century, population levels at the time of Webster's census in 1755 were probably not much above those of the mid seventeenth century. (52) After 1600 the trend was indeed towards the gradual amalgamation of holdings in many areas rather than their subdivision, partly due to landlord policy and possibly also to modest capital accumulation by some sections of the tenantry. (53)

As regards geographical variations in holding sizes, Dodgshon has shown that farms and holdings were comparatively small in the North East where many tenants probably worked less than 20-30 acres of land. Holding sizes tended to increase southwards through Forfarshire, Fife and the Lothians to Berwickshire. South of the Forth it was not uncommon for some tenants to have holdings of 300 acres or more. Holdings were also relatively small in the western lowlands, probably comparable in size with the North East. (54) While Aberdeenshire and Renfrewshire may have had a preponderance of smaller holdings, Forfarshire and Fife, which were also important centres of rural textile manufacture, did not. Many tenants were probably working holdings which were too small to give them anything other than a bare subsistence due to high levels of rent and low crop yields. This did not necessarily mean that they had enough free time to engage in industrial activity on a commercial scale to supplement their incomes.
though. On many estates a good deal of the tenants' free time was taken up performing labour and carriage services for the proprietor. (55)

The lack of correspondence between small holdings and concentrations of rural industry introduces the possibility that the relationship between the two may have been the reverse of the one usually postulated. The classic argument is that rural industry usually developed where holdings were small and liable to further sub-division, and that they were located away from areas of large-scale grain production. In Scotland rural textile production was concentrated in areas which were oriented towards cereal production and in which holdings were not particularly small. The apparent paradox is resolved if one considers Scottish farm structures as a two-tier system. The cottars rather than the tenants were the group which had access to land but without enough to make a full living from agriculture. Proto-industrialization usually envisages rural industrial workers as acquiring smallholdings through subdivision due to partible inheritance, or squatting on the waste. Neither of these factors was important in Scotland. The group which occupied small plots of arable land was not located in remote upland areas but was fully integrated into the lowland farming economy. The parallels between cottars in lowland Scotland and the land-poor smallholders and labourers of the eighteenth-century Pays de Caus studied by Gullickson are striking. (56) Upland areas lacked rural industry due not only to restrictions on squatter settlement. Farms in some upland areas like west Aberdeenshire were multiple-tenant ones with few cottars. In other districts, as in the eastern Borders, they were large single-tenant sheep runs where the continuation of a subsistence arable element alongside
commercial livestock rearing absorbed much of the labour which might otherwise have been directed into textile production.

In lowland arable areas the demand for labour on the land was characterised by seasonal peaks and periods of under-employment. Where holdings were relatively large a good deal of the farm work was done by people who were not members of the tenants' families. Some of this labour was provided by living-in farm servants but such people had to be maintained throughout the year by the tenant. They would not have been engaged unless they could have been kept in full-time employment. Cottars provided the extra labour for ploughing, sowing, harrowing, carting, peat cutting and harvesting. In the slack periods between, as well as working their own holdings, they could supplement their incomes by engaging in weaving or other craft activities. This may explain how weaving came to be centred in areas like Forfarshire and Fife which were also major grain producers. Studies of rural industry in early-modern Europe have produced other examples of areas which concentrated on arable farming yet had textile industries geared to distant markets: Armagh for instance. (57) In Scotland it was evidently the related patterns of agriculture and rural social structure which produced this link.

A gradual trend towards the reduction of tenant numbers per farm has been identified in many areas during the later seventeenth and early eighteenth centuries. (58) This was achieved by gradually consolidating the fractions of multiple-holding farms until they were converted to single tenancy. This increased holding sizes, decreased tenant numbers, and raised the demand for non-tenant labour as society became more polarised. However,
as long as a system of cottar labour remained, streamlining farm structures in this way tended to increase the smallholding element in the rural population which had to depend in part on rural industry. Agriculture and rural textile production in lowland areas would only have become separated when the cottar system was replaced by one where landless labourers were employed full-time for money wages instead of receiving smallholdings, with migrant labour brought in from outside to cope with seasonal peaks of demand such as the harvest. The cottar system only began to decline in this way during the later eighteenth century.

How did textile manufacture in Scotland integrate with agriculture? There was little problem with spinning which was done almost entirely by women and could be fitted into the slack periods of virtually any household or farm economy. Although women provided an important part of the rural labour force during harvest time they did not normally work in the fields at other seasons until the spread of root crops towards the end of the eighteenth century increased the demand for weeding. As a result, to a greater degree than men, women were liable to seasonal underemployment in the traditional Lowland farming system and thus had the time, and the incentive through lack of alternative employments, to try and increase their families' incomes by spinning, as was the case in the similar economy of the Pays de Caux. (59) A notable feature of the second half of the eighteenth century is the spread of commercial spinning outside the main weaving areas into adjacent lowland agricultural parishes and to more distant Highland and northern districts (Map 2). This spread is likely to have been in part a result of demand for yarn outstripping the capacity of spinners in the main weaving areas. Moreover, in such areas there were
competing sources of employment for women; the embroidering of muslins was enticing many women away from the spinning wheel in the 1790s as it paid better. (60) So did work in the bleachfields and the new cotton mills. Manufacturers were forced to look further afield for their yarn. In areas like Highland Perthshire and Aberdeenshire spinning quickly became a mainstay of the economy, providing much of the cash needed to pay the rent. (61) Following the bad harvest of 1782 yarn spinning kept many poor families in such areas alive.

Stocking weaving in Aberdeenshire was another example of a rural industry centred in a lowland region with a predominantly female labour force. Aberdeenshire had been a major producer of woollen plaiding as well as knitted stockings in the later seventeenth century but by the end of the eighteenth century the area made little cloth for commercial sale. Over much of the county, however, a high proportion of the women, as well as many boys and old men, knitted stockings. In the early eighteenth century the industry had been based on local wool supplies. Agricultural changes with the adoption of new rotations greatly reduced the sizes of the flocks in lowland parishes. (62) This allowed Aberdeen merchants to extend their influence over the industry by turning to imported English wool and controlling its supply. As with the spinning of linen yarn, stocking knitting had become crucial as a source of cash to pay the rents of poorer smallholders. The stockings were exported to London and Holland but the area faced competition from knitters in Jersey, Guernsey and Germany which, along with the spread of frame knitting, was driving prices and wages down. (63) Although spinning linen yarn was potentially more profitable and was, in some parishes, taking over from stocking knitting, there was
considerable resistance to the changeover. The minister of the parish of Keith-Hall recorded that a woman could knit "and do some little things about her house at the same time. Or she can work at her stocking while feeding her cows." (64) Knitting was considered less physically demanding, less sedentary and more healthy than spinning. In Orkney and Shetland stocking knitting was also geared to overseas markets. Shetland provides an interesting example of a domestic rural industry which survived with little change from the eighteenth to the twentieth century.

The literature on proto-industrialization has relatively little to say concerning industries where the work was performed entirely by women though the importance of the gender division of labour in the local economy of areas in which commercial manufacture takes root is beginning to be appreciated. (65) Such industries could fit into a variety of economies: mixed farming in Aberdeenshire, livestock rearing in Highland Perthshire and a crofting-fishing economy in Shetland. It is interesting to speculate why these areas did not develop weaving as well. Sheer distance from the manufacturing centres and a lack of inherent skills in the population may have been the case in the Highlands and the far north. The prosperity of fishing in Shetland may have prevented the development of weaving while the adoption of improved systems of farming in Aberdeenshire may have had the same effect. These areas of purely female employment were fairly transient phenomena representing the apotheosis of the putting-out system before factory-based manufacturing began to concentrate employment. In terms of the model they are rather special cases of deindustrialization.
Traditional domestic weaving also integrated well with agriculture. Under this system weavers were dependent on local families handing over their yarn for making up. Demand was often seasonal, being slack in summer when additional labour was needed in agriculture and picking up again after harvest when there was more money available and less need for labour on the land. (66) The seasonality of this demand allowed rural weavers to provide a reserve of farm labour. As the commercial side of the industry grew, rising demand not only led to an expansion of the labour force but also to a growing time commitment on the part of established weavers. Durie has suggested that in the early part of the eighteenth century it was probably difficult for weavers tied to purely local markets to obtain more than six months' work in any year. (67) By the end of the century, however, a weaver working for distant markets could operate virtually full-time, the steadiness of the demand from international markets reducing the seasonal element in his working year. (68)

Such weavers must have become increasingly distanced from their agricultural background. The demand for greater efficiency in the use of agricultural labour also encouraged a split between the full-time agricultural and industrial worker. By the end of the eighteenth century the involvement of many weavers in agriculture must have been confined to harvest work. Changes in farm organisation, particularly in the later eighteenth century, encouraged the removal of cottars whose shares of land reduced the size and efficiency of farms. They were replaced by wage-earning landless labourers supplemented in some areas such as the North East by crofters settled on newly reclaimed land who provided occasional day-labour for the larger farms. Most arable areas began to make
considerable use of migrant female labour to help with the harvest. As there was a shortage of such labour in the Lowlands and a high proportion of women in the southern Highlands were working at home spinning, this labour was drawn from the more distant northern and western Highlands beyond the reach of the textile industries. (69) Increasing commercialization of agriculture squeezed the cottar-weavers off the land at precisely the time that increasing demand from the industrial sector allowed them to move into textile manufacturing full-time and earn good wages.

Where did the weavers go when they were phased out as cottars? Some stayed on the land as labourers, their former holdings absorbed into the reorganised farms. Others carved out plots of land from the waste and continued to combine agriculture with industry. Many migrated to the towns where the decline of guild restrictions was making it easier for incoming weavers to set up. Some moved only a short distance to the new planned estate villages which landowners were establishing throughout Scotland. One of the objects of such villages was to absorb labour which was being released from the land by the reorganisation of agriculture. Lockhart has shown that they recruited from very local hinterlands. (70) Some of their original inhabitants were tenants or their sons who had been forced to leave the land due to farm restructuring. Others were cottar-weavers moving into textile manufacture on a more full-time basis. Weaving was an important element in many planned villages and the principal activity in some. (71) In such villages smallholdings were usually available and agriculture remained an important element.
Proto-industrialization usually considers external demand as the main influence in encouraging specialization in rural industry in areas of increasingly small holdings. In Scotland, however, the development of commercial agriculture may have played a positive role in creating a more specialised industrial workforce by encouraging cottars to move into full-time textile manufacture. At the same time independent weavers became increasingly drawn into putting-out systems controlled by urban manufacturers. There is little evidence of highly organised putting-out systems in Scotland during the seventeenth and early eighteenth centuries. The ones which are known were usually closely focused on the suburbs and immediate hinterlands of the major burghs. Most cloth was either produced for local use or by independent weavers for sale in local fairs or nearby towns. Urban clothiers would travel round these fairs buying the cloth from individual weavers. Putting-out systems developed greatly in scale and importance during the eighteenth century. Although there were still a few customary weavers producing cloth for purely local consumption in the early nineteenth century putting-out systems had long since dominated production. (72) The details of this development require further study. By the 1790s independent weaving was more characteristic of the woollen industry. This was probably because woollen manufacture, being more concerned with the home market than linen production, remained more traditional and loosely organised to a later date. (73) Where independent weavers survived in the linen industry it was often in the more peripheral parts of the main manufacturing areas. Growth of demand for linen beyond the capacity of Scottish flax production, and an increasing reliance upon imported raw materials, probably allowed merchants to extend their hold over the
producers faster than in the woollen trade where home-produced wool remained important.

CONCLUSION.

In this chapter it has only been possible to outline a few aspects of a complex topic, the nature of the early phases of industrialization in Scotland. Many aspects of Scotland's economy and society combined to produce the distinctive patterns of proto-industrial production in the seventeenth and eighteenth centuries. The strong trading monopolies which the ancient royal burghs retained until the later seventeenth century enabled them to exert powerful control over industrial production in their rural hinterlands. In some respects this promoted rural industry as Scottish burghs functioned more as trading and finishing centres than as foci of industry. On the other hand, as entrepreneurship was overwhelmingly located in the burghs this is likely to have encouraged textile production to concentrate in lowland areas around the major towns rather than in more remote upland areas. (74) The growing importance of temporary migration to the Lowland harvest from the more distant parts of the Highlands during the later eighteenth century also worked against the development of commercial cottage industry in this area. One of the most important influences which determined the distribution and character of rural industrial production was the agrarian structure of Lowland Scotland. In particular, the dependence until the later eighteenth century on a class of smallholding cottars who formed the majority of rural families in most areas created a social group with only limited access to land and every incentive to try and diversify their activities into industrial work to increase their
incomes. It is clear that the proto-industrialization model is not completely effective in explaining the distribution and character of rural textile industries in seventeenth- and eighteenth-century Scotland. This was due to particular combinations of cultural, social and economic structures and the nature of some of these have been considered. On the other hand the application of the model does focus attention on a range of questions which have been neglected or side-stepped by historians of Scotland's industrial and social development. This emphasises the need for more detailed analyses of rural social structure in Scotland and the role of industry in relation to it. It is hoped that this essay has been able to demonstrate the advantages of fitting such analyses into a more rigorous theoretical framework which facilitates comparison with rural industry in other countries and regions.
NOTES.

1. The character of the Scottish economy at the end of the seventeenth century is described in T.C. Smout, Scottish trade on the eve of the Union, 1660-1707, (Edinburgh, Oliver and Boyd, 1963) Scotland's industrialization in the eighteenth and nineteenth centuries has recently been surveyed by R.H. Campbell, The rise and fall of Scottish industry 1707-1939, (Edinburgh, John Donald, 1980).


3. T.M. Devine, The Union of 1707 and Scottish development. Scottish Economic and Social History 5 1985 23-40


31. Ibid. 274.

32. Ibid. 31-7.


34. F.F. Mendels Seasons and regions in agriculture and industry during the process of industrialization. In S. Pollard (ed.) Region und industrialisierung, (Gottingen) 1980, 183.

35. The demographic aspects of proto-industrialization are discussed in L.A.Clarkson, (1985), op.cit., 39-50.

36. P.Kreidte et.al. (1981) op.cit. make very little reference to migration as a factor influencing population growth in proto-industrial areas.


39. Ibid. I 378, II 200, IV 474, VI 515, IX 476.

40. Ibid. passim.


42. A.J.Durie, (1979), op.cit., 80,100.


44. Ibid.


46. Ibid. II 539, IX 469, XIII 85.

47. Ibid. V 20, VII 113, IX 388, XIV 460, XVI 96.


50. The poll lists for Aberdeenshire and Renfrewshire have been


59. G.L.Gullickson 91983) op.cit.

60. Statistical Account (1791), op.cit., VII 381, IX 370.

61. Ibid. II 469, XVI 341.

62. Ibid. II 539.

63. Ibid.

64. Ibid. IX 469.


66. Ibid. X 244.


68. Ibid.

69. Ibid. 158.


74. Statistical Account (1791), op.cit., passim.

URBANIZATION IN EARLY-MODERN SCOTLAND: A PRELIMINARY ANALYSIS.

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INTRODUCTION.

Although a good deal has been written about Scottish burghs, particularly their institutional development, comparatively little attention has been given to Scottish TOWNS in the pre-industrial period. Recently, however, there has been an upsurge of research on the economic and social structure of towns in late-medieval and early-modern Scotland. (1) Nevertheless, the focus of this work has been on individual towns rather than the Scottish urban system as a whole. (2) Two recent surveys omit any consideration of urbanization at all (3) and even Lynch's recent volume on the early-modern Scottish town has little to say about Scottish urban development in its wider perspective. (4) The study of urbanisation has been pursued more vigorously by urban historians in other European countries but so far this theme has received little systematic consideration in a Scottish context. The purpose of this article is to bring into focus this important, yet neglected, topic by attempting a preliminary analysis of the scale and nature of urban development in early-modern Scotland, principally during the seventeenth and eighteenth centuries, and to assess some of the implications of urbanisation for Scotland's society and economy.

SCOTTISH URBANISATION IN A EUROPEAN CONTEXT

As a starting point some figures provided by de Vries in his study of European urbanization between 1500 and 1800 are illuminating (Table 1). (5) These figures can be challenged as they are based on estimates of varying quality and do not make use of the most recent research on Scottish urban populations in the sixteenth and seventeenth centuries. (6) Notwithstanding, at this level of generalisation his results are probably sufficiently accurate for the trend of long-term growth in Scottish towns with over 10,000 inhabitants to be a real one. Much has been written about the distinctiveness of English urbanization in early-modern times and its contrast with urban development elsewhere in Europe. (7) However, the similarities between the experience of Scotland and England as shown in Table 1. - and the ways in which they both differed from the rest of Europe - are striking. According to de Vries, the urban population of Scotland living in towns with over 10,000 inhabitants grew steadily in every 50-year period between 1550 and 1800. By 1800 the level of urbanization, by this measure, was the highest in Europe after England, the Netherlands and Belgium - three times that of Germany and twice that of France. (8) Apart from Scotland and England, only Ireland showed a similar pattern of sustained urban growth but here urbanization began later and was overwhelmingly concentrated in a single city, Dublin. By 1800 only 7% or Ireland's population lived in towns with over 10,000 inhabitants against Scotland's 17.3% (9).
The table implies that Scotland had virtually the highest rate of urban growth in Europe between the sixteenth and the eighteenth centuries — faster than that of England at times. Scotland thus appears to have been the only European country to share the English pattern of steady urban growth throughout the early modern period irrespective of whether national population was increasing or stagnating. If these figures can be accepted, they suggest that the scale and significance of Scottish urbanisation from the sixteenth to the eighteenth century has been underestimated: - even De Vries fails to comment on it.

Can these figures be taken at their face value though? Assuredly not! For a start, De Vries' threshold of 10,000 inhabitants is arbitrary. On this basis, in a country as small as Scotland a modest gain in the population of a single town like Aberdeen or Dundee, from say 9,500 to 10,000 inhabitants, would have an unduly large impact on the percentage of the population which was urbanised. De Vries acknowledges this and emphasises the importance of looking at the urban systems in their entirety by examining the whole hierarchy, including smaller centres, as far as available data allow. (10) In the case of Scotland, without further evidence it would be dangerous to assume that the figures in Table 1 necessarily summarise the course of Scottish urbanization as a whole. De Vries' figures reflect only the tip of the iceberg of Scottish urban development. If the entire Scottish urban system grew at the same rate as the larger towns then there are few problems. If, however, the larger centres grew at a different rate from the smaller burghs, and particularly if two or three cities increased their populations at the expense of the
smaller centres, then the picture presented by Table 1 may be misleading. This point is especially important as de Vries has characterised the period from the first half of the seventeenth century to c.1750 as one in which, throughout Europe as a whole, urbanisation tended to stagnate with cities gaining population at the expense of smaller towns. (11) Did Scotland share in this trend or was her pattern of urban development different?

**SCOTTISH URBAN DEVELOPMENT: SOURCES AND PROBLEMS.**

Inevitably an attempt to examine early-modern urbanization in more detail produces difficulties with sources. For the sixteenth century information is as yet too scanty to allow many conclusions to be drawn. The royal burgh taxation lists do give a series of rankings of urban prosperity but work on contemporary England has shown that urban growth and urban prosperity are not always related in a simple and direct way. (12) It is impossible to convert these tax lists into population estimates. There are, however, indications that some towns at least grew quite substantially. Lynch has estimated that the population of Edinburgh doubled between c.1550 and c.1650. (13) Other towns may have grown at comparable rates; given that Scotland’s total population was increasing one would expect urban growth to have been widespread, as was the case elsewhere in Europe, though it remains to be seen whether the actual proportion of Scotland’s population which was urbanized grew significantly in this period. (14) Growth was not necessarily universal or continuous though. Using the royal burgh taxation lists Lynch has drawn attention to the occurrence of frequent short-term economic crises in many medium-sized and larger towns in sixteenth-century Scotland. (15) Until more detailed research is undertaken it is not clear to what extent these economic vicissitudes were linked with changes in population. Nevertheless, the existence of a marked state of flux in the economic fortunes of sixteenth-century burghs should be borne in mind when we come to consider population changes in towns during the seventeenth century.

For the seventeenth century data which can provide estimates of urban population are still scarce but more information is available, particularly for the smaller burghs. Lynch has suggested that while Edinburgh and Glasgow continued to grow during the later seventeenth and early eighteenth centuries other large towns stagnated while there was a general decline of population in the smaller royal burghs. (16) He bases this theory on a comparison of two sets of data which can be manipulated to give indications of urban population. The first is an assessment of the rents of urban property in the royal burghs, drawn up in 1639. (17) The second is the hearth tax returns of 1691. (18) Comparing these data sets involves many problems including converting the information to population estimates, assessing the likely margins of error of these estimates, and deciding how comparable are population figures produced by two very different processes. Lynch is commendably cautious regarding the 1639 rent assessments, emphasising that the totals for Edinburgh, the Canongate and Aberdeen have been swelled by the effects of the town houses of the nobility. For smaller burghs, however, he suggests that the relationship between rental value and population was fairly constant. He then indicates approximate population levels for towns in 1639 and compares these with the number of hearths in 1691, without attempting to convert urban hearths to
population estimates, and suggests that a general decline had occurred. (19)

TABLE 2. POPULATION CHANGE IN SCOTTISH TOWNS 1639-1691

<table>
<thead>
<tr>
<th>Burgh/Parish</th>
<th>POP 1639</th>
<th>POP 1691</th>
<th>CHANGE</th>
<th>EVIDENCE OF DECLINE 1692</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edinburgh</td>
<td>30,000</td>
<td>50,000</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Glasgow</td>
<td>14,000</td>
<td>18,000</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Aberdeen</td>
<td>12,000</td>
<td>12,000</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Dundee</td>
<td>12,000</td>
<td>8,000</td>
<td>x</td>
<td>3</td>
</tr>
<tr>
<td>St. Andrews</td>
<td>6,750</td>
<td>3,750</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Dumfries</td>
<td>6,250</td>
<td>3,250</td>
<td>x</td>
<td>1,2</td>
</tr>
<tr>
<td>Perth</td>
<td>6,000</td>
<td>3,800</td>
<td>x</td>
<td>1,2</td>
</tr>
<tr>
<td>Inverness</td>
<td>5,250</td>
<td>3,700</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Montrose</td>
<td>5,200</td>
<td>3,500</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Ayr</td>
<td>4,250</td>
<td>5,000</td>
<td>x</td>
<td>1,2</td>
</tr>
<tr>
<td>Stirling</td>
<td>3,250</td>
<td>3,600</td>
<td>x</td>
<td>1</td>
</tr>
<tr>
<td>Haddington</td>
<td>3,250</td>
<td>5,100</td>
<td>x</td>
<td>1</td>
</tr>
<tr>
<td>Irvine</td>
<td>3,250</td>
<td>2,400</td>
<td>x</td>
<td>1</td>
</tr>
<tr>
<td>Elgin</td>
<td>3,000</td>
<td>775</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Kirkcaldy</td>
<td>3,000</td>
<td>3,400</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Burntisland</td>
<td>2,250</td>
<td>1,300</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Linlithgow</td>
<td>2,250</td>
<td>4,100</td>
<td>x</td>
<td>1</td>
</tr>
<tr>
<td>Kirkcudbright</td>
<td>2,000</td>
<td>500</td>
<td>x</td>
<td>2</td>
</tr>
<tr>
<td>Dumfarton</td>
<td>1,750</td>
<td>950</td>
<td>x</td>
<td>1,2</td>
</tr>
<tr>
<td>Banff</td>
<td>1,500</td>
<td>1,600+</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Cupar</td>
<td>1,500</td>
<td>1,900</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Lauder</td>
<td>1,400</td>
<td>1,300</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Rothesay</td>
<td>1,400</td>
<td>550</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Forfar</td>
<td>1,350</td>
<td>1,800</td>
<td>x</td>
<td>1,3</td>
</tr>
<tr>
<td>Tain</td>
<td>1,350</td>
<td>1,100</td>
<td>x</td>
<td>2,3</td>
</tr>
<tr>
<td>Dunbar</td>
<td>1,350</td>
<td>2,600</td>
<td>x</td>
<td>2</td>
</tr>
<tr>
<td>Brechin</td>
<td>1,350</td>
<td>2,100</td>
<td>x</td>
<td>1,2</td>
</tr>
<tr>
<td>Culross</td>
<td>1,200</td>
<td>1,600</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Dysart</td>
<td>1,200</td>
<td>2,550</td>
<td>x</td>
<td>2,3</td>
</tr>
<tr>
<td>Arbroath</td>
<td>1,200</td>
<td>1,300</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Dunfermline</td>
<td>1,200</td>
<td>4,000</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Renfrew</td>
<td>1,000</td>
<td>950</td>
<td>x</td>
<td>1</td>
</tr>
<tr>
<td>Lanark</td>
<td>900</td>
<td>1,650</td>
<td>x</td>
<td>1</td>
</tr>
<tr>
<td>Peebles</td>
<td>900</td>
<td>1,350</td>
<td>x</td>
<td>1</td>
</tr>
<tr>
<td>Rutherglen</td>
<td>800</td>
<td>950</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Anstruther E.</td>
<td>800</td>
<td>750</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Cullen</td>
<td>800</td>
<td>500</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Jedburgh</td>
<td>800</td>
<td>1,800</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Kincorth</td>
<td>750</td>
<td>1,400</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Crail</td>
<td>750</td>
<td>1,450</td>
<td>x</td>
<td>2</td>
</tr>
<tr>
<td>Inverkeithing</td>
<td>700</td>
<td>950</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Forres</td>
<td>700</td>
<td>500</td>
<td>900</td>
<td>x</td>
</tr>
</tbody>
</table>
1= competition from baronial burghs. 2= ruined or uninhabited houses. 3= losses due to campaigns of 1689-91. 

1639 estimates based on 1.7 persons per £1 valued rent - after Lynch. 
Hearth tax estimates based on number of paid hearths + 20% to allow for unpaid and poor divided by 1.6 to convert to households and multiplied by 4.5 to give population. (20)

ESTIMATED POPULATION OF LARGER BARONIAL BURGHS, 1691

<table>
<thead>
<tr>
<th>BURGH</th>
<th>POP.</th>
<th>PARISH POP.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Musselburgh</td>
<td>3,100*</td>
<td>4,700</td>
</tr>
<tr>
<td>KilmaNOck</td>
<td>2,750</td>
<td>4,050</td>
</tr>
<tr>
<td>Hamilton</td>
<td>2,750</td>
<td>4,000</td>
</tr>
<tr>
<td>Falkirk</td>
<td>2,000*</td>
<td>3,800</td>
</tr>
<tr>
<td>Trament</td>
<td>1,700</td>
<td>3,250</td>
</tr>
<tr>
<td>Paisley</td>
<td>2,500</td>
<td>3,300</td>
</tr>
<tr>
<td>Kelso</td>
<td>2,500</td>
<td>3,300</td>
</tr>
<tr>
<td>Prestonpans</td>
<td>2,500</td>
<td>3,300</td>
</tr>
<tr>
<td>Greenock</td>
<td>1,800</td>
<td>2,700</td>
</tr>
<tr>
<td>Dalkeith</td>
<td>2,000*</td>
<td>2,600</td>
</tr>
<tr>
<td>Kilkenny</td>
<td>2,450*</td>
<td>2,400</td>
</tr>
<tr>
<td>Bo'ness</td>
<td>550*</td>
<td>2,150</td>
</tr>
<tr>
<td>Frasersburgh</td>
<td>550*</td>
<td>2,200</td>
</tr>
<tr>
<td>Peterhead</td>
<td>1,325</td>
<td>1,900</td>
</tr>
<tr>
<td>Alloa</td>
<td>850</td>
<td>1,600</td>
</tr>
<tr>
<td>Clackmannan</td>
<td>850</td>
<td>1,250</td>
</tr>
</tbody>
</table>

* - Estimate from poll taxes 1694-96 (pollable persons multiplied by 33% to allow for those under 16 and then by 30% to allow for unrecorded poor.)

To explore this possibility further the author has attempted to estimate the populations of most of the larger burghs in 1639 and 1691 from these two sources (Table 2). It must be emphasised that such an attempt is fraught with problems and that the resulting estimates are only approximate. In particular, the populations of St. Andrews and Dumfries in 1639 seem too high, probably because of the effects of resident landowners while, with the hearth tax estimates there is the possibility that the conversion factors applied may have varied between large and smaller burghs. Nevertheless, the attempt is worthwhile as long as the figures are treated with suitable circumspection. The basis on which each set of population estimates has been derived is indicated in the table. A further difficulty is that the hearth tax returns frequently give only parish, not burgh, totals. This makes it hard to estimate whether growth or decline has occurred in small burghs in parishes which contain substantial landward populations. Estimates have been made of whether individual towns had
grown, declined, or approximately maintained their populations between the two dates.

Even allowing for the imperfections of the data it is clear that apart from Edinburgh and Glasgow many larger towns do seem to have declined between 1639 and 1691. (21) Decline was not universal though. Some royal burghs seem to have maintained and even increased their populations, including Stirling, Linlithgow, Culross and Dunfermline. Overall, instances of decline among the royal burghs are balanced by those of growth. The report on the condition of the royal burghs in 1692 provides additional evidence of urban decline in the form of complaints of competition from baronial burghs, descriptions of ruinous and empty houses and, for the northern burghs, claims of losses due to the campaigns of 1689-91. Lynch has taken these reports as a genuine indication of widespread urban decline while Mitchison has been more sceptical, pointing out that as the survey was for the purpose of tax reapportionment it was in the interests of individual burghs to plead poverty. (22) Table 2 shows some of the evidence from this report. Because the surveys vary in detail it cannot be assumed that burghs which made no complaints were experiencing no difficulties. Nevertheless the table does show that complaints were recorded by towns which appear to have grown since 1639 as well as those which seem to have declined. The picture is thus far from being a clear-cut one of widespread urban decline leading to population loss.

It should also be remembered that the 1639 list only includes royal burghs. Apart from satellites of Edinburgh like the Canongate and Leith it omits baronial burghs. To what extent would the 1639 population table be altered if comparable data on burghs of barony were available? At that date few baronial burghs had grown to a substantial size and their omission probably affects only the lower end of the table, especially below the level of 1,000 or so inhabitants. By 1691, however, the picture had changed. In the later seventeenth century the corollary of the decline of a number of old royal burghs was significant growth by many baronial burghs including those which were linked with the economies of Edinburgh and Glasgow (Dunkeld, Musselburgh, Greenock, Paisley), coal and salt-producing burghs (Bo'ness, Prestonpans) and a range of other centres like Kilmarnock, Fraserburgh and Peterhead. The estimated populations of the larger baronial burghs in 1691 are also given in Table 2. While it is not possible to quantify their growth since 1639 there is ample evidence for many of them that expansion was rapid and substantial. (23) When the fortunes of these burghs are set against the decline of some of the older royal burghs the idea of the growth of Edinburgh and Glasgow at the expense of an overall decline of population in medium and smaller centres cannot be sustained. While some middle rank and smaller royal burghs had declined, the situation was more complex with towns at all levels of the hierarchy expanding, stagnating or declining depending on local and regional factors. There is a clear need for more detailed research on this theme but the pattern has clear similarities to Lynch's sixteenth-century one of frequent short term urban crises throughout the urban hierarchy.

For urbanisation in the eighteenth century we have Webster's census of 1755 (24) and the first official census of 1601. However, while these provide fairly accurate information on the sizes of the larger Scottish towns they are less useful for the smaller ones. As with the hearth tax
the large size of many Scottish parishes means that the populations of small towns are often swallowed up by those of the landward area. This causes problems for many middle-rank towns too, including Dunfermline, Haddington and Inverness. However, the parish descriptions of the Old Statistical Account, drawn up during the 1790s, give the populations of almost all settlements with over 500 inhabitants. For the larger towns the estimates may be less accurate. Notwithstanding, the smaller the community the more accurate is likely to be the estimate. We can therefore construct a virtually complete and fairly accurate urban hierarchy, including all the smaller centres, for the 1790s.

Table 3 estimates the proportions of the Scottish population living in towns of certain sizes at various dates from the sources reviewed above. Between 1639 and 1691 the demographic importance of Edinburgh clearly increased. Despite the growth of Glasgow the proportion of the population in the other larger regional centres appears to have fallen slightly, and that in medium-sized centres more markedly. Thus far the pattern supports Lynch's thesis. It is likely, however, that the proportion of the population in towns of this class has been inflated by over-estimates for St. Andrews and Dumfries among other burghs. Moreover, a reduction of the population in larger and medium-rank towns between 1639 and 1691 appears to have been balanced sufficiently by the expansion of smaller towns, including many baronial burghs, for the overall proportion of the population in towns with more than 2,000 inhabitants to be maintained. Stagnation or even modest growth rather than overall decline seems to be the trend rather than the larger towns simply gaining population at the expense of the smaller ones. As a result of the differential pattern of growth, however, the seventeenth century saw an intensification of the division of the Scottish urban hierarchy into a few large towns and many small centres with a lack of medium-rank towns. This pattern may relate in part to the centuries-old prominence of the 'big four' - Edinburgh, Aberdeen, Dundee and Perth, joined in the seventeenth century by Glasgow. The size and economic strength of these regional centres appears to have limited scope for the development of middle-rank towns. Their ability to engross large sectors of internal as well as overseas trade may have encouraged a sag lower in the urban hierarchy. (25) Equally, Scotland's distinctive pattern of trade, dominated by the export of unprocessed or partly processed primary products and imports of manufactures has been seen as hindering the development of urban industry in Scotland. (26) Such a situation would have tended to produce many small centres whose role in overseas trade was disproportionate to their size, but little industry; the Fife burghs come readily to mind. Many of the larger middle-order towns - Ayr, Dumfries and Inverness for instance - were relatively remote from the large regional centres. This may have allowed them a more independent role. Other towns in this category were located roughly midway between the larger centres - like Dunfermline, Montrose, and Stirling.

**TABLE 3. Percentage of total population in Scottish towns.**

<table>
<thead>
<tr>
<th></th>
<th>1639</th>
<th>1690s</th>
<th>1755</th>
<th>1790s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital</td>
<td>2.7</td>
<td>4.5</td>
<td>4.5</td>
<td>5.6</td>
</tr>
</tbody>
</table>
Scotland was not characterised by a single over-large primate city in the way that England or even Ireland was. At the end of the seventeenth century Edinburgh was perhaps twice the size of the second city, Glasgow. By the later eighteenth century Glasgow and Edinburgh were roughly equal in population. However, in the seventeenth century the combined populations of the four largest provincial centres, Glasgow, Aberdeen, Dundee and Perth, exceeded that of the capital to a greater degree than in most other European countries. This suggests that in Scotland, compared with England and Ireland, the role of the major provincial centres was greater, reflecting perhaps the strong element of localism and decentralization in Scottish society. (27) It may also suggest that the Scottish urban system was, as yet, not fully integrated, with a series of distinct urban regions focusing on relatively large regional 'capitais' rather than a single urban hierarchy centred on Edinburgh.

Between the 1690s and 1755 the pattern of development changed with Edinburgh increasing its population only modestly while accelerated growth occurred in other towns with over 10,000 inhabitants, particularly Glasgow, and in the smaller centres. By the second half of the eighteenth century growth was more markedly concentrated in towns with over 10,000 inhabitants and the proportion of the population in smaller centres actually fell, contrary to the trend discerned by De Vries at this period over much of North West Europe, (28) although the proportion of the Scottish population living in towns nevertheless continued to grow. Even in the mid-eighteenth century industrial growth was more characteristic of rural areas, organised through the towns by putting-out systems (29) and, as Mitchison has indicated, growth in the urban sector at this period was linked more to service activities which had not yet begun to filter down the hierarchy to the smaller centres. (30) The rapid growth of new industrial centres, particularly those with coalfield locations, was still to come.

There is a need to study the changing fortunes of individual towns in relation to the regional economies within which they operated. For instance, was the limited growth of Dalkeith and Musselburgh in the eighteenth century due to a change in their relationship with the capital? Did suburban expansion around Edinburgh take the place of growth in her more distant satellites? The coal and salt burghs of the Forth are often presented as the success stories of the seventeenth century but during the
eighteenth century they fared less well. Whateley's study of the salt industry in the eighteenth century has shown that it did not experience the dramatic decline which was once thought to have occurred; (31) and coal output was increasing. So why did towns like Prestonpans and Bo'ness barely maintain their populations when other towns were expanding rapidly? Admittedly, coal mining and salt-making were not primarily urban industries but they occurred close to towns because port facilities were required for exporting their products. In addition, in the eighteenth century other industries such as iron smelting, pottery and chemicals developed around Bo'ness and Prestonpans but as towns they remained fairly small. (32)

Wrigley has stressed that in continental Europe very few small towns rose through the ranks to become large centres. In England, however, the old urban hierarchy was changed almost beyond recognition during the later seventeenth and especially the eighteenth centuries. (33) In Scotland the most remarkable long-term alteration in the urban hierarchy was the rise of Glasgow. There was also the rapid rise of Paisley to become the third largest town in 1801 and Greenock, whose origins were even more recent, to sixth place.

Although, as in England, the eighteenth century saw the relative - and sometimes absolute - decline of many old-established sheriffdom centres to a greater degree than in England the old provincial capitals retained their prominence - notably Glasgow but also Aberdeen, Dundee and to a lesser extent Perth. Due to the lack of vigorous middle-order centres they were able to maintain their traditional pre-eminence. (34) Many of the fastest growing towns of the eighteenth century were effectively satellites of these regional centres such as Paisley and Greenock for Glasgow. In this sense there was less change than in the English urban hierarchy. The regional centres of the sixteenth and seventeenth centuries became the industrial centres of the nineteenth.

"NEW TOWNS" IN EARLY-MODERN SCOTLAND: THE BURGS OF BARONY.

It is evident that towns with under 5,000 inhabitants had almost as large a share of the urban population as those with over 10,000 in the seventeenth and eighteenth centuries. Moreover, the percentage of the national population in towns with under 5,000 inhabitants was greater in Scotland than in England during the later seventeenth and the first half of the eighteenth centuries. (35) This suggests that more attention should be directed towards Scotland's smaller towns. We need to know more about the activities which went on in them, how they varied in their social and economic structures, and especially the nature of their linkages with larger urban centres. In is curious that we know much more about smaller burghs in the sixteenth and seventeenth centuries than we do in the eighteenth. Inevitably there are problems in deciding where the cut-off threshold between urban and rural should be at the lower level. Everitt, in his study of English market centres, uses a threshold of between 500 and 1000 - in his view not all centres of this size were urban. (36) For Scotland with a dispersed rural population a lower threshold might be appropriate - perhaps around the 500-600 level in the 1690s, maybe a bit higher a century later.
Scotland was one of the few areas of Europe where new 'urban' centres - the word is used advisedly - were being created during the sixteenth and seventeenth centuries - the plague of new baronial burghs and non burghal centres which infects any map of Scottish market centres. (37) This proliferation of new centres has frequently been mentioned but little attempt has been made to consider their role and function or their place within the developing urban system.

The creation of these new centres again suggests a degree of immaturity in the Scottish urban hierarchy. However, little is known about the significance of these new foundations. What were the proportions of successes and failures? What were the motives which led landowners to found such centres and to what degree did they finance facilities and infrastructure in them? What were the links between the new foundations and demographic and economic growth? How many of the new centres achieved true urban status and what functions did they carry out? In particular how did they relate to the existing urban centres?

Between 1500 and the early eighteenth century some 270 new baronial burghs were authorised. The number is not a precise one because it is sometimes difficult to differentiate between genuinely new foundations and efforts to re-establish ancient burghs whose activities had declined or whose rights were not clearly defined. (38) In seeking to determine how many of them achieved truly urban status four attributes are useful as yardsticks: the development of a corporate administrative structure, the existence of functioning markets and fairs, the possession of an occupational structure sufficiently diversified to distinguish them from surrounding rural settlements, and a certain minimum population size. The first three attributes can be established for some, though not all, burghs of barony at any one time. Population is the best criterion with which to start. The information given by the O.S.A. allows us to determine how many baronial burghs had reached particular population thresholds by the end of the eighteenth century.

<table>
<thead>
<tr>
<th>POP. NO. OF</th>
<th>ROYAL BURGHS</th>
<th>BARONIAL BURGHS (ANCIENT)</th>
<th>POST 1500</th>
<th>NON-BURGHAL MARKETS</th>
<th>PLANNED ESTATE SETTLEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOWNS</td>
<td>NO %</td>
<td>NO %</td>
<td>NO %</td>
<td>NO %</td>
<td>NO %</td>
</tr>
<tr>
<td>5000+</td>
<td>16</td>
<td>11 69%</td>
<td>2 12%</td>
<td>3 19%</td>
<td>0</td>
</tr>
<tr>
<td>4999-2000</td>
<td>33</td>
<td>14 42%</td>
<td>9 27%</td>
<td>7 21%</td>
<td>1 3%</td>
</tr>
<tr>
<td>1999-1000</td>
<td>72</td>
<td>17 24%</td>
<td>13 18%</td>
<td>10 42%</td>
<td>2 3%</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>4 6% 6 8%</td>
</tr>
</tbody>
</table>
Table 4 demonstrates the position of post-1500 baronial burghs in the urban hierarchy of the 1790s. Blumén has remarked that towns emerging in the later stages of urban development rarely reached the upper levels of the urban hierarchy as such positions had already been pre-empted by earlier settlements. (39) This was certainly true for Scotland. Post-1500 baronial burghs contained only 17% of the urban population in centres with over 1000 inhabitants. Among towns with populations of over 5000 only Greenock and Kilmarnock had been authorised after 1500. Pre-sixteenth century foundations also made up nearly three quarters of centres with populations of between 1000 and 1999 inhabitants. However, baronial burghs did account for nearly a third of all centres with between 1000 and 4999 inhabitants and over half those between 500 and 999. The post-1500 foundations had clearly established themselves mainly at the lower levels of the hierarchy.

If we accept as a criterion of success a minimum population of 500 by the 1790s then only about 25% of burghs of barony founded after 1500 had succeeded. Many others had between 200 and 499 inhabitants, often with active markets and fairs. Such centres cannot be considered as total failures but neither were they truly urban. This high failure rate is hardly surprising. Many burgh charters appear to have been obtained as a result of mere whims by landed proprietors, out of local rivalries or simply through following the fashion of their neighbours. (40) Some centres were founded in good faith but failed to prosper while others succeeded for a time but then declined. It is worth noting that many moribund baronial burghs had been recently revived in the later eighteenth century with the development of manufactures, particularly textiles. In all probability most proprietors who obtained a burgh charter were only seeking to attach the right to hold markets and fairs to existing rural settlements - parish centres or kirk touns - and did not envisage them developing into towns. Some baronial burghs: the coal and salt towns of the Forth and specialist centres like Leadhills - did have an industrial base but the majority probably functioned mainly as service centres. Instances of large-scale capital investment by landowners such as the Erskines of Linlithgow and Alloa, are probably the exception rather than the rule. (41)

SOME IMPLICATIONS OF SCOTTISH URBANIZATION.

What are the implications of urban growth in early-modern Scotland? Even if we accept that many Scottish urban dwellers still had some part-time involvement in agriculture it seems clear that the size and importance of the urban, non-agricultural population in the seventeenth and eighteenth century has been underestimated. This steadily-growing urban population had to be fed. That it WAS fed suggests that Scottish agriculture was not perhaps as inefficient as has sometimes been suggested. Equally, the urban population may have exerted a greater influence on the agricultural sector, in terms of demand, than has sometimes been accepted.

By the later seventeenth century Scottish agriculture was not only meeting this demand but was also exporting a substantial surplus of grain
and cattle. Of course, population on the land was rising too in the long term but as the percentage of the population which lived in the larger towns increased the implication must surely be that productivity per head in agriculture increased too, whether by the development of more efficient and intensive farming systems, better livestock management, or structural changes such as the shift from multiple tenant to single tenant farms. (42) Whether increasing urban demand generated increasing prosperity for tenant farmers as well as landowners has still to be determined.

We know little about internal trade and the supply of food to the growing towns. At what point, for instance, did Edinburgh, Glasgow or even Aberdeen and Dundee grow beyond the capacity of their immediate hinterland to supply them? What effects did this have on agriculture and internal trading patterns at a regional scale? The linkages which such growing centres developed with smaller centres acting as markets through which food supplies were channelled may have been important too.

Again using Wrigley's model, urban growth of this type, closely paralleling England, suggests that real income per head was rising, generating more demand for manufactured goods and services. (43) This is something which is often touched on obliquely when considering early-modern Scottish economic and social development - in such aspects as the rise of the urban professional classes - but perhaps it should be given more prominence and its ramifications and implications examined in more detail.

There are also implications for how towns managed to maintain their populations and continue to grow. It is widely accepted that the larger towns of early-modern Europe had death rates which exceeded those of the surrounding country, or their own birth rates. (44) This necessitated a continued influx of migrants, young men and women, to maintain the urban populations and allow expansion. This is a familiar story for London and English provincial cities. More recently it has been suggested that the inability of towns to increase their populations without migration was due less to high death rates due to insanitary conditions, than to lowered fertility rates caused by an influx of young temporary migrants who were prevented by social constraints from marrying - or indeed whether it was a combination of these and other factors. (45)

We know little about death rates in Scotland's larger towns but it is likely that Edinburgh's average death rates were higher than those for surrounding rural areas. The problems of waste disposal and water supply outlined by Walter Makey (46) suggest that the capital was a distinctly unhealthy city. Whether this applied to less densely built up regional centres like Glasgow, Aberdeen and Dundee, never mind the smaller towns, is not clear. However, the plagues of the 1640s clearly attacked the towns more severely than the countryside merely because of the greater concentrations of population there, irrespective of other health conditions. (47) It is also clear that the larger towns at least received a steady influx of young people - apprentices, and female servants - who would have been prevented by their situations from marrying early. (48) Both these sets of influences would have tended to create an imbalance between urban and rural population replacement levels.
In the past emphasis has been put on the migration of Scots overseas - to foreign mercenary service, and the Ulster plantations. (49) The evidence for urban growth suggests that there much have been considerable internal migration in the early modern period. Recent research has shown that the Scots at home were much mobile than was once thought (50) but the impact of rural-urban migration on both the receiving and the source areas has still perhaps been underestimated. The doubling of Edinburgh's population in the half century before the 1640s must have been due largely to in-migration. To have achieved a rate of growth of urban population comparable to or in excess of England, even allowing for the possibility of a reduced differential in rates of natural increase between the Scotland's countryside and her smaller towns, the level of in-migration to the towns can scarcely have been much less. Traditionally it has been emigration which has been viewed as the mechanism for relieving population pressure in the Scottish countryside but perhaps we should re-assess the role of movement to the towns.

It is easy, however, to become preoccupied with the movement of people into the towns and underestimate the importance of the counter-current of people moving back to the countryside. (51) In early-modern Scotland this may have included many apprentices who had learned their trades in the larger burghs and who returned to their home areas. There must also have been a return flow of women from urban to rural areas. The poll tax records for Edinburgh and Aberdeen suggest that the four largest Scottish towns in the late seventeenth century must have employed at least 12,000 female domestic servants; at a rough estimate perhaps 1 in 10 girls in the 16 to 25 age cohort in Scotland. (52) Many of these girls came from the countryside. Some may have married and remained in the towns but many returned to the country, as the published marriage registers for eighteenth-century Edinburgh suggest. (53) This two-way flow of young female labour represents a flow of money from town to countryside, either as remittances back to families or as accumulated savings for marriage. So far there are no indications of how important such flows of capital were to the rural economy. Return migration from the towns, whether male or female, must also have transmitted new tastes, fashions and ideas. In the O.S.A. minister after minister in rural areas comments on the spread of fashions such as the wearing of imported cloth and tea drinking, innovations which first appeared in the larger towns and were disseminated into rura areas. It would be interesting to see if comparable trends could be detected at an earlier date. Scotland was a small country with a relatively mobile population; one wonders what proportion of the population, particularly in the Lowlands, had visited Edinburgh and how this compared with the percentage of Englishmen who had direct experience of London. (54)

Lynch has highlighted the social and economic contrasts that existed between the larger burghs in the sixteenth century. (55) We also need to know more about functional specialization in the smaller towns and how they were integrated into the urban system. It seems that while some Scottish towns in the sixteenth and seventeenth centuries had elements of specialisation - the coal and salt burghs of the Forth or some of the Fife fishing burghs - these were grafted on to a basic occupational structure which was fairly constant from one burgh to another. (56) In the eighteenth century, however, signs of specialization appear even among the smaller towns. Spa and resort centres like Moffat, communications centres like
Portpatrick and one-industry towns like Catrine and Stanley begin to appear among the lower levels of the urban hierarchy. There are also indications that during the eighteenth century there was a change from general trading towards manufacturing as the mainstay of the economies of many small centres but the nature and progress of this has yet to be charted.

CONCLUSION.

This paper, partly speculative in character, has tried to identify some of the distinctive features of Scottish urbanisation during the early modern period and to emphasise the importance of this neglected theme. It is acknowledged that the population data on which some of the arguments are based are liable to a degree of error but it is hoped that they are sufficiently accurate to point to general trends. More research on Scottish urban development during the eighteenth century is required to show how the early-modern burgh evolved into the nineteenth-century industrial town. A more comparative framework is needed which, while bearing in mind the distinctive elements of Scottish urban development, makes greater use of ideas generated from the study of towns elsewhere. Emphasis has been placed on the contribution of small towns to Scottish urban development at this period and it is hoped that this article will provide a stimulus to further investigation of these as well as of the larger regional centres.
NOTES.


9. Ibid.

10. Ibid. 49-54.

11. Ibid. 257-8.


16. Ibid.

17. Ibid

19. Lynch in Houston and Whyte (op. cit.)

20. These calculations are based on M. Flinn (1977) op.cit. 196-200.


25. M. Lynch in Houston and Whyte op.cit.


30. Old Statistical Account XVIII 426ff (Bo'ness), XVII 611ff (Frostonpans)

31. B.A. Wrigley (1965) op.cit.

32. M. Lynch in Houston and Whyte op.cit.

33. de Vries (1984) op.cit.


G. S. Pryde (1963) op.cit.


E.A. Wrigley (1985) op.cit.

de Vries (1984) op. cit. 179-82.

Ibid. 182-97.


M. Flinn (1977) op.cit. 133-49.


M. P. Maxwell. The Scottish migration to Ulster in the reign of James VI. London (1973)


This is one of Ravensteins famous 'laws' of migration. See D. Grigg. E. G. Ravenstein and the "laws of migration" Journal of Historical Geography. 3 (1977) 41-54.

I.D. Whyte & K.A. Whyte. in L. Leneman op.cit.

53. M. Lynch in Houston and Whyte op.cit.

54. Ibid.

55. I.D. Whyte. The occupational structure of Scottish burghs in the later seventeenth century. In M. Lynch (1987) op.cit. 219-44.

56. Ibid.