MID-NINETEENTH CENTURY LABOUR MOBILITY: THE CASE OF THE COAL-MINERS OF HETTON-LE-HOLE, CO. DURHAM

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The aim of this paper is to analyse the mobility of the coalmining population who lived in Hetton-le-Hole, a mining settlement in the east of Co. Durham in the middle of the nineteenth century. Hetton-le-Hole is located six miles north east of Durham City on the western edge of the concealed coalfield of east Durham. The first successful sinking for coal occurred at Hetton in 1822 with the opening of the Hetton Lyons colliery after some fifty years of sporadic attempts to prove the existence of marketable reserves of household coal beneath the magnesian limestone which covered the coal measures in east Durham. Within a decade, the small rural village of Hetton-le-Hole was transformed into a mining community of nearly 6000 people by the large-scale influx of labour attracted by the opportunity of employment provided by the Lyons Colliery and two other collieries which were established at Eppleton and Elemore in the immediate vicinity of Hetton during the 1820s¹.

The principal source for the study is the 1851 census enumerators' books for Hetton parish, from which information about the birthplaces of the members of all the coalminers' families has been obtained: in 1851 coalminers were recorded as heads of households in 641 (53 per cent) of the 1198 households in the settlement. The 1851 census enumerators' books provide the earliest reasonably reliable source of information from which the detailed movements of large numbers of individual families can be at least partially reconstructed. As this was the first census in which birthplaces and ages were recorded, it is possible to see where certain families were living at given dates before 1851. Using this information, two analyses have been attempted in this paper: firstly, the birthplaces of each coalminer head of household have been plotted and secondly the birthplaces of their children have been recorded. For this purpose the children have been placed in five year age groups, from 0-4 years to 20-24 years, and the distribution of the birthplaces of the children in these five age groups has been analysed in relation to the contemporary development of the Northumberland and Durham coalfield. The use of this technique gives some indication of the movement of the coalminers between their birthplaces and their arrival at Hetton, although the use of this method will not permit the total reconstruction of coalminer migration prior to 1851, as single miners and childless couples are not mentioned. Furthermore the nature of the evidence does not indicate residence in a given place unless a subsequently surviving child was born during the period of residence. Nevertheless, the birthplace distribution of the children plotted in the five year age groups reveals a changing spatial pattern which accords closely with the contemporary vicissitudes of the coal industry in Northumberland and Durham.

Table 1. The birthplaces of the coalminers who were heads of households: 1851

•	No.	%	
Hetton parish	23	3.59	
Co. Durham	339	52.89	
Northumberland	182	28.39	
North of England*	60	9.36	
Rest of England and Wales	16	2.50	
Scotland	5	0.78	
Ireland	5	0.78	
Foreign	1	0.16	
Born at sea	1	0.16	
Not known	9	1.40	
Total	641	100.00	

^{*} The north of England has been defined as Cumberland, Westmorland, Yorkshire and Lancashire.

From Table 1 and Figure 1 it can be seen that the great majority of the coalminer heads of household (85 per cent) had been born in north-east England with the majority of the remainder originating from the rest of the north of England. Within this latter category, the two most important counties of origin were Cumberland and Yorkshire. Of the 24 Cumberland-born coalminers, most recorded birthplaces in the Pennine lead dales of the Alston area; similarly many of the 29 Yorkshire-born coalminers had been born in the lead mining district of Swaledale near Reeth. Somewhat surprisingly only five coalminer heads of household were Irish-born although the Irish did form a noticeable minority (3.6 per cent) of the total population of Hetton.

The distribution of the birthplaces of the coalminer heads of household born in Co. Durham

The analysis of the location of the birthplaces of the 339 coalminers born in Co. Durham indicates very strongly that the commonest source of labour for this newly-exploited section of the coalfield was provided by a short-range movement of miners from other parts of the Durham coalfield. Some 211 (62 per cent) of the Durham-born coalminers had originated in the mid-Wear valley section of the Durham coalfield immediately to the west of Hetton where mining communities had been established close to the river Wear from the seventeenth century onwards. It is interesting to note that miners had moved from the old-established colliery villages close to the river Wear such as Fatfield and Lumley as well as from the colliery settlements created or expanded early in the

nineteenth century at locations even closer to Hetton such as Pittington, Rainton and Moorsley.

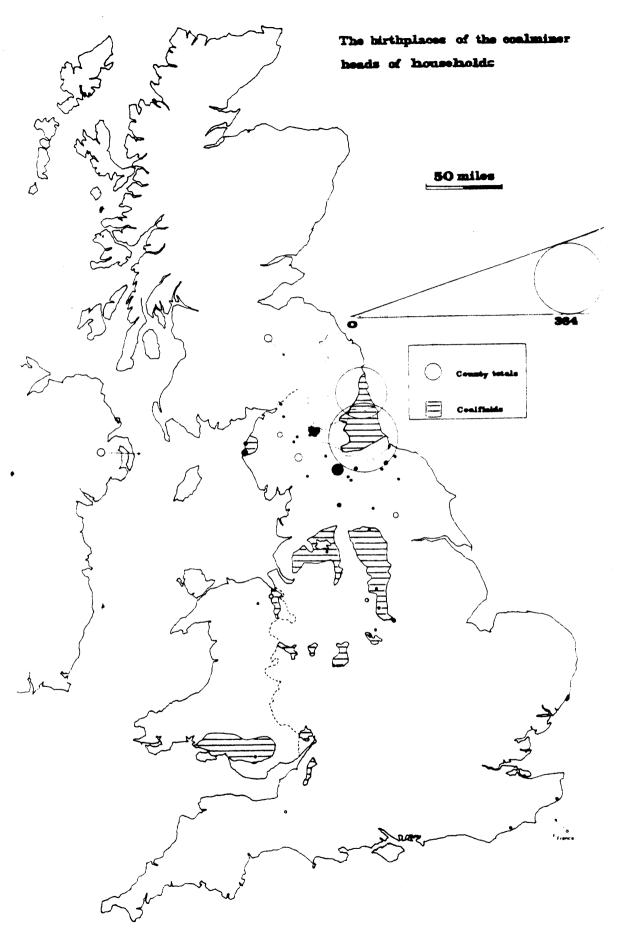
The second section of the county from which many of the Durham-born coalminers had moved was lower Tyneside, defined as the Durham bank of the river Tyne downstream from Gateshead. Some 55 (16 per cent) of the Durham-born miners had originated in places such as Jarrow and Hebburn, where a peak of coal production at the beginning of the nineteenth century had been followed after about 1820 by a decline³. Some of the subsequent emigration of miners was directed to Hetton, either directly, or following a period of employment at the collieries in the Rainton - Pittington area immediately to the west of Hetton⁴.

Only nineteen coalminer heads of household had been born outside the Coalfield area within Co. Durham and of these seventeen came from Pennine dales such as Weardale. As it is possible that some at least of these miners were lead miners who had moved on to the coalfield for employment as a result of the depression in the lead mining industry of the 1830s, it can be suggested that very few indeed of the Durhamborn coalminer heads of households originated in purely rural backgrounds.

The distribution of the birthplaces of the coalminer heads of households born in Northumberland

One hundred and eighty two coalminers had been born in Northumberland; of these, 113 (62 per cent) had been born in the south east of the county, to the east of Newcastle and to the south of the major geological fault in the coal measures known locally as the ninety fathom dyke. This section of the Northumberland coalfield had reached a peak of coal production in the early part of the nineteenth century and a subsequent decline led to the emigration of coalmining families, particularly in the 1820s and 1830s, to both east Durham and to the newly developing section of the Northumberland coalfield north of the ninety fathom dyke. Only nine miners living in Hetton in 1851 had been born in mining villages such as Cramlington, Seghill and Dudley, which had grown rapidly in response to this northerly spread of mining in the 1830s and 1840s, but a more frequent movement had occurred from the older mining communities closer to the river Tyne, such as Benton, Longbenton and Wallsend, in which 31, 15 and 13 miners respectively had been born.

Newcastle was the birthplace of 23 of the Hetton coalminers. In the majority of cases, the named locations in the Newcastle area such as Fawdon, Kenton and Coxlodge coincided with the existence of working collieries at the dates of the births of the miners. In contrast to the pattern of origin of the Durham-born miners, 20 of those born in North-umberland had originated from rural locations, particularly in Tynedale and rural mid-Northumberland. It is possible that this small group represent some of the few actual examples of occupational mobility amongst the total north east born colliery labour force living at Hetton in 1851.



The distribution of the birthplace of the children of coalminers

Any analysis of the distribution of the birthplaces of the miners alone gives little information concerning the actual patterns of family mobility prior to residence at Hetton. In order to gain an insight into this aspect of labour mobility in the Northumberland and Durham coalfield in the twenty five years before 1851, a study has been made of the plan of the birthplaces of the children of the miners and of the miners' widows.

Table 2 The children of the coalminers and widows of coalminers: locations of birthplaces in relation to age.

•					Αç	ge Group	os					
4		0-4		5-9	7	10-14	-	15-19		20-24	Т	otals
Birthplace	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Hetton	414	59.00	150	35.97	121	35.80	69	31.65	23	26.74	777	44.12
Co Durham	223	31.77	176	42.21	127	37.57	89	40.83	34	39.53	649	36.85
Northumberland	63	8.97	81	19.42	73	21.60	45	20.64	19	22.09	281	15.96
North of England	0	0.00	4	0.96	9	2.66	8	3.67	4	4.65	25	1.42
Rest of England/ Wales	1	0.14	3	0.72	5	1.48	5	2.29	5	5.81	19	1.08
Scotland	1	0.14	2	0.48	1	0.30	1	0.46	0	0.00	5	0.28
Ireland	Ó	0.00	1	0.24	1	0.30	1	0.46	1	1.62	4	0.23
Not known	Ō	0.00	Ó	0.00	1	0.30	0	0.00	Ó	0.00	1	0.60
	702	100.00	417	100.00	338	100.00	218	100.00	86	100.00	1761	100.00

Table 2 indicates the overall pattern of birthplaces for each of five age groups.

Clearly the overwhelming majority of coalminers' children had been born in Northumberland and Durham, with only 3 per cent originating outside the north east. Very few coalminers' families had come from Scotland or Ireland, and similarly few families can be classed as long-distance migrants within England and Wales. However, the proportion of children born outside the north east is detectably, if only slightly, higher amongst the older age-groups and this trend may provide local illustration of the longer range migration that characterised, according to J W House, the movement of workers into Northumberland and Durham coalfield during the 1830s⁵. The proportion of children born in Hetton diminishes with increasing age and only in the youngest age-group does this category form an overall majority. This pattern could be explained as simply reflecting the residential pattern of the years immediately prior to 1851, but even in this 0-4 year age group 41 per cent of the children had been born outside Hetton. This illustrates the extent to which immigration into Hetton in the latter half of the 1840s contributed towards the demographic revival which occurred after the decline of the population between 1831 and 18416.

The distribution of children's birthplaces in Co Durham

All of the oldest age-group of 'children', 20-24 years old, were born in the mid-Wear Valley and lower Tyneside. The movement of their families to Hetton had taken them from these long-established mining areas towards expanding sections of the coalfield between 1827 and 1831. Most of the eighty nine children in the 15-19 age-group were also born

in the mid-Wear valley and on lower Tyneside, but a few had been born on the concealed east Durham coalfield. This last group must represent the children of miners who had been attracted to the nascent mining villages that were in the process of being established on the concealed coalfield during the first half of the 1830s. The distribution of the birthplaces of the 127 children in the 10-14 age-group shows that whilst most had been born either in the mid-Wear Valley close to Hetton, or on lower Tyneside, increasing numbers originated from the newly-established mining settlements of east Durham such as Haswell. Sherburn Hill. Shotton, Thornley and Wingate. In all these villages, mining operations had begun before or during the period 1836-1841. The early existence of the mobility of coal miners' families between the villages of the newlyexploited concealed coalfield is indicated by these entries and is confirmed by the fact that large numbers of children in the 5-9 age group were born in these new communities. Their parents must have moved to Hetton to find work during the first half of the 1840s. The short range of the migration to Hetton in the five years preceding 1851 is again emphasised by the distribution of the birthplaces of the children in the youngest age-group, 59 per cent of the children aged between 0-4 years having been born in Hetton itself; of the remainder, the great majority came from the adjacent villages in the mid Wear valley and from the mining communities on the concealed east Durham coalfield. Very few had been born on upper Tyneside, in north west Durham or in the rural parts of the coalfield.

The distribution of children's birthplaces in Northumberland

Two significant facts emerge from an analysis of the distribution of the birthplaces of the children born in Northumberland. Firstly, one mining community alone, Benton, located three miles north east of Newcastle, was the source of ninety six of the 284 children born in the county. As they are found in every age-group, this would suggest a sustained movement of families from Benton to Hetton from at least as early at the late 1820s. Furthermore, when it is realised that some of the Benton migrants lived in neighbouring blocks of miners' cottages in Hetton, something akin to an organised movement of mine workers is suggested. perhaps in response to recruitment by the Hetton coal company which operated the three collieries in the locality. Secondly, the distribution of the oldest age-group of children is more geographically restricted than that of the younger children. The nineteen 'children' aged between 20 and 24 all originated close to the river Tyne, whereas the widening pattern of the birthplaces of the younger children reflects the expansion of the exploitation of the coalfield during the 1830s and 1840s. Several of the younger children had been born in villages such as Cramlington, Seghill, Seaton Delaval and Seaton Burn; these were all mining communities located on the section of the Northumberland coalfield to the north of the ninety fathom dyke, that profited from the exploitation of the deeper coal seams with their much desired steam coals between 1830 and 1850. The birthplace evidence of some of these families indicates that a movement from the old-established mining settlements south of the ninety fathom dyke to the newer colliery villages north of the dyke was a first stage in family mobility which was then followed by a movement to Hetton in the 1840s. However, even in the case of the youngest

age-group, the majority of the children had been born in the declining colliery districts closer to the river, such as Benton and Wallsend, and their families appear to have moved directly to east Durham, although not always immediately to Hetton.

Summary

The evidence of the census enumerators' books of Hetton in 1851 clearly demonstrates that the colliery labour force had been highly mobile in the twenty five year period before 1851, both within and between the various sections of the Northumberland and Durham coalfield. Complex patterns of migration from areas of stagnant or declining coal production to an area which was experiencing an extension of coal-mining operations have been confirmed from the evidence of the recorded birthplaces of the miners' children. Most of this coalfield migration appears to have been short range with many of the coalminer heads of households having been born in the contiguous mid-Wear valley section of the Durham coalfield. Long-distance migrants were numerically insignificant: the most frequent origins of those living in Hetton in 1851 were in the adjacent counties of Cumberland and the North Riding of Yorkshire with a small number of coalminers coming from declining lead-mining and linen-weaving areas. It would appear that Hetton, in the middle of the nineteenth century, was very largely peopled by coalmining families who moved frequently from colliery to colliery within the north eastern coalfield. Possibly the Hetton population was idiosyncratically mobile owing to factors not revealed in the censal data, but it is only by detailed investigations of the mobility of the colliery workforce in other mining * settlements that the migratory characteristics of the Hetton mining community can be compared with those of their fellow workers in the Northumberland and Durham coalfield.

NOTES

1. Population figures for Hetton-le-Hole parish 1801-1851 Source: Enumeration abstracts of the Answers and Returns to the Population Acts. 1801-1851, Parish of Hetton-le-Hole, Co Durham

1801	253
1811	322
1821	994
1831	5951
1841	4260
1851	5751

The expansion of population recorded in the 1821 census reflects the extension of colliery sinking operations and railway construction prior to the opening of Hetton Lyons Colliery in 1822.

The great growth of population during the 1820s was caused by the opening of the three local collieries which in 1831 employed 1792 men and boys.

In a footnote to the 1841 Enumeration abstract the decrease of population and great number of uninhabited houses (228) in Hetton parish are explained by the opening of new collieries in surrounding townships to which a large part of the mining population had migrated.

- Census Enumerators' Books 1851. Registrar's District. Hetton-le-Hole. PRO ref. H.O. 107 2393(2).
- 3. A E Smailes, North England, Second Edition (1968) 162.
- 4. It is through an analysis of the birthplaces of the children of the coalminer heads of households that patterns of movement of such families can be reconstructed.
- 5. J W House, North Eastern England: Population movements and the landscape since the early nineteenth century. University of Newcastle upon Tyne, (1959) 12.
- 6. Enumeration abstracts 1851, Parish of Hetton-le-Hole.