

LANDOWNERSHIP AND THE LANDSCAPE:  
A STUDY OF THE EVOLUTION OF THE COLLIERY LANDSCAPE OF  
HETTON-LE-HOLE, CO. DURHAM  
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Although there is documentary evidence of coal mining in Co. Durham as early as the twelfth century, it is well known that the nineteenth century witnessed a remarkable growth of coal production achieved by the extension of coal mining operations to sections of the coalfield distant from the early centres of production near the rivers Tyne and Wear. During the last century, parts of the county previously rural in economy and landscape were transformed with great rapidity, through the process of mining colonisation, into densely-populated industrial areas. Collieries, with their surface installations, waste heaps and workshops were linked by wagonways and railways to tidewater, whilst close by, the mining settlements, barrack-like structures of terraces and courts were quickly erected to house the immigrant workforce and their families. Writing in 1841 about East Durham, the Child Employment Commissioner noted that,

"where formerly there was not a single hut of a shepherd, the lofty steam-engine chimneys of a colliery now send their columns of smoke into the sky, and in the vicinity a town is called, as if by enchantment, into immediate existence"<sup>(1)</sup>

Whilst seriously under-estimating the extent of the pre-mining pattern of rural settlement in East Durham, this extract does underline the awe with which contemporaries must have observed the mushroom growth of the colliery landscape, with its technological innovations, in this previously rural and unexploited part of the Durham coalfield. It also appears to be implicit in this and other descriptions of the process of coalfield colonisation that the total assemblage of the colliery landscape was super-imposed ruthlessly upon the antecedent pattern of rural settlements, fields and communications: that the location of the collieries themselves, the alignment of the railways and the siting and morphological evolution of the colliery settlements bear little relationship either to physical conditions or to the pre-mining patterns of landownership and the rural landscape. Through an examination of the parish of Hetton-le-Hole, in East Durham, it is proposed to test this generalization and so attempt to determine just what factors influenced the creation and the evolution of the industrial landscape in the parish between 1820, the year of the first sinking and the mid-nineteenth century, by which time a community

of almost 6000 people had developed.

In 1851 Hetton parish included the three townships of Hetton, Great Eppleton and Little Eppleton. Until 1838 these three townships formed the southern part of the ancient parish of Houghton-le-Spring and they lay adjacent to its boundary with Easington parish. Granted parochial status in that year,<sup>(2)</sup> Hetton parish straddled the geological and physiographic boundary formed by the western edge of the magnesian limestone outcrop of the East Durham plateau. This location is important within the context of coalmining in east Durham because it was in Hetton parish, at Hetton Lyons, that the first successful sinking through the limestone of the concealed coalfield occurred between 1820 and 1822 as a culmination of fifty years of sporadic and unsuccessful sinkings to prove the existence of commercially exploitable coal deposits under the magnesian limestone.<sup>(3)</sup> Extraction of coal from Hetton Lyons colliery was soon augmented by production from the neighbouring Elemore Colliery (1826) located in Pittington parish and from Eppleton Colliery by 1832. The opening of these collieries, all of which were owned and worked by the Hetton Coal Company, was directly responsible for the rapid population growth recorded in the parish particularly in the 1820s as the following table demonstrates. The marked

Table 1

Hetton parish: number of households and total population

	houses	population	houses	population	
1801	53	253	1831	1062	5951
1811	56	322	1841	936	4260(228 houses uninhab.)
1821	109	994	1851	1144	5751

drop in population in 1841 and the commensurate existence of 228 uninhabited houses in that year is explained at least in part by the author of the footnotes of the 1841 census abstracts who states that,

"the great number of uninhabited houses and the decrease of population ... arises from several new collieries having been opened in the surrounding townships, which has caused a large portion of the mining population to remove thither."<sup>(4)</sup>

Despite such temporary setbacks, the thirty years or so after 1820 witnessed a profound transformation of the economy and landscape within Hetton parish. Following the opening of the three mines a complex industrial system was imposed upon a rural framework; large-scale capitalist deep mining connected

by temporary rail links to tidewater stimulated the creation of a large colliery community in an area previously purely rural in character. However these new patterns of human activity were not fashioned without reference to the pre-industrial cadaster. In order to understand the processes which influenced the locations and plan arrangements of the various elements of the colliery landscape it is first necessary to examine the patterns of landownership which existed prior to and during the early phases of mining colonisation and to explore the relationships between the landowners and the colliery company.

Through an examination of two estate plans<sup>(5)</sup>, the Land Tax Returns for the three constituent townships of the parish from 1789-1831<sup>(6)</sup>, and the Tithe Plans and Apportionments (1838-1839)<sup>(7)</sup>, it is possible to reconstruct the patterns of landownership. Table 2 shows that each township in 1838-1839 was dominated by one major landowner. In Hetton, the Hon. Maria Bowes Barrington owned singly or shared 955 acres, 60% of the 1595 acres in the township: twelve other landowners shared the remaining land but of these only R.J. Pemberton (212 acres), the Hetton Coal Company (161 acres) and Jane Hutchinson (87 acres) possessed estates much in excess of fifty acres. In Great Eppleton township, Francis Mascall owned 526 acres out of 695 (76%), whilst Little Eppleton township was entirely owned by Mr. G.T. Fox and Mary Croston.

Table 2.

Hetton township: table of landowners as listed in the Tithe Apportionment 1839

R. Anderson	1	0	27	Hetton Coal Company	161	0	17
J. Armstrong	3	3	33	H. Lamb	0	2	0
Hon. Maria Bowes Barrington	858	1	37	J. Pemberton	212	2	32
{ Hon. M.B. Barrington				J. Wilson	0	1	27
{ Sir James Masgrave	97	1	10	T. Wood	2	1	37
Geo Baker	5	3	15	Houses	25	2	1
J. Barrrell	52	2	3	Lanes, waste etc.	39	0	37
Rev. J. Hutton (ex-crs)	49	0	1				
J. Hutchinson	87	3	12				
					1595	0	9

Great Eppleton township 1838

Francis Mascall	526	1	32
Hon. Maria Bowes Barrington	72	2	23
Edward Shipperdson	92	2	08
	695	2	23

Little Eppleton township 1839

G.T. Fox & Mary Croston	335	1	24
	<u>335</u>	<u>1</u>	<u>24</u>

The distribution of the principal estates within the parish are shown in Fig. 1. Having briefly introduced the pattern of landownership it is now appropriate to consider the influence of this factor on the process of mining colonisation in the parish.

Firstly, with reference to the locations of the two collieries actually sunk within the parish, Hetton Lyons and Eppleton, it is apparent that they were both sunk on the estate of the lord of the manor of Hetton, John Lyon on whose death the estate passed to the Hon. Maria Bowes Barrington. Furthermore, Fig. 2 demonstrates that the two collieries were located on portions of land added to the Lyon estate between 1776 and 1826. In the case of the site of Eppleton Colliery, the Lyon family had acquired the ownership of a seventy six acre section of the Great Eppleton township at some date between 1793 and 1804<sup>(8)</sup>, adjacent to Hetton township upon which Eppleton Colliery was subsequently sunk. About a mile to the south of Eppleton Colliery, the Hetton Lyons mine was developed on land which had passed into the ownership of John Lyon just prior to 1817<sup>(9)</sup>. This correlation between the recent acquisition of land and the siting of the mines suggests that a close relationship existed between the landowning and coalmining interests; a further evidence is afforded by the confirmation that the exploratory borings to ascertain the feasibility of coalmining under Hetton township, which can be dated from as early as 1772, seem to have occurred solely on land owned by the lord of the manor<sup>(10)</sup>.

In a series of agreements between the principal estate owners and the Hetton Coal Company drawn up during the period 1820-1822 the financial motives of the owners of the surface of the ground, who also owned the mineral rights under their estates, are most apparent. For example in an agreement of June 1822, just a few months prior to the first drawing of coal from the Lyons pit, Lyon granted the following rights to the coal company:-

- a) pit and heap room
- b) wayleave by horses, ropes, rollers or engines
- c) the building of waggonways to the Wear or elsewhere, not to exceed fifteen yards in width, except for mounts, bridges, cuts or batteries.
- d) the building of dwelling houses, hovels, stables, fire-engines etc.<sup>(11)</sup>

In return for these rights the company, as was common on the Northumberland and Durham coalfield<sup>(12)</sup>, paid Lyon three types of rent, a clear yearly rent, a royalty on the coal extracted which varied with the seam, and an additional wayleave rent levied on the tonnage of coal transported over Lyon's land<sup>(13)</sup>.

Although standing to profit by the extraction of the coal beneath their land, the major landowners also exercised a negative influence over the location of the collieries. In 1822 John Lyon, anxious not to allow mining to intrude too close to his house, forbade the sinking of any pit within 500 yards of Hetton Hall and its landscaped grounds<sup>(14)</sup>. Francis Mascall denied the coal company the right to sink for coal on any part of his Great Eppleton estate<sup>(15)</sup>. As a result, Eppleton Colliery was sunk in 1826 on land owned by Lyon and leased to the coal company in the west of Great Eppleton township.

From the time of the first borings and sinkings at Hetton Lyons (1820-1822), the coal company had pursued a vigorous policy of land purchase and the acquisition of leases. By 1838-39, the company owned 161 acres of Hetton township, the Downs estate (Fig. 1) and leased a further 487 acres of which 476 acres was rented from the Hetton estate. On this tract of land which lay in an arc around its own Hetton Downs estate, the coal company had also purchased from the landowner a series of rights to permit the sinking of shafts and the transport of coal<sup>(16)</sup>. The site of Hetton Lyons Colliery, as would be expected, lay in this land occupied by the coal company which also leased small pieces of land close to its colliery installations at the Lyons and Elemore with a view to their future use for industrial purposes. For example, the field immediately to the east of Hetton Lyons colliery, which was leased from John Pemberton, was subsequently used as a waste heap. Similarly, in the south of Hetton township, the three fields lying just south of the miners' cottages at Brick Garth, were leased from the Hetton estate and used as the site of the pit heap for Elemore Colliery.

Secondly, in the case of the evolution of the pattern of railways linking the collieries to tidewater at either Bishopwearmouth or Seaham Harbour, the influence of "lordly intervention" can be identified through an examination of the agreements made between the coal company and the major landowners. John Lyon insisted that no waggonway should cross the grounds of Hetton Hall<sup>(17)</sup> and Francis Mascall precluded the construction of any line within 440 yards of his mansion at Great Eppleton<sup>(18)</sup>. In Little Eppleton township, Fox and Croston were even more specific in insisting that the company should not,

"make or lay any waggonway nearer to the south side of the mansion house than 150 yards, nor any such way on the north side of the mansion to the south of the beck which runs through the thicket or fox cover."<sup>(19)</sup>

In each case these constraints were observed and the alignment of the railways built in the parish were influenced by the various demands of the local landowners.

Thirdly, it remains to examine the extent to which the location and plan characteristics of the mining settlement created after 1820 was influenced by landownership policies and the antecedent rural landscape. Central to this section is an examination of the landownership policies of the Hetton Coal Company which as mentioned above began to buy land in Hetton parish at about the time of the first successful sinking at Hetton Lyons. In a valuation of Hetton Colliery dated September 6 1823, reference is made to the recent purchase by the company of a twenty eight and a half acre estate<sup>(20)</sup>. This must represent the initial purchase of land in Hetton Downs as by 1826 the coal company owned 158 acres at the Downs<sup>(21)</sup>; by 1839 the Tithe map of Hetton township indicates the existence of the company estate in a contiguous block at Hetton Downs totalling 161 acres. It was on part of this land that the coal company rapidly built the mining settlement known as Hetton Downs. By as early as 1827 110 houses had been built on the company land<sup>(22)</sup> and the 1851 census enumerators' books record the existence of 244 households 91% of which were headed by coal miners<sup>(23)</sup>.

In the most southerly part of the Hetton Downs estate a unit of housing called the Square was similarly occupied almost entirely by coalminers and their families, with twenty two of the twenty five households headed by a gainfully employed person (88%), being headed by miners. However, in the five streets lying immediately to the south of the square, which were built on land not owned by the coal company, the proportion of households headed by coalminers drops noticeably, if variably, to 64%, 48%, 25%, 47% and 56% respectively. It would appear therefore that soon after the purchase of the Hetton Downs estate the coal company built houses on the land for the almost exclusive use of its workforce compared with the streets nearer to the old pre-mining core of the settlement where a wider range of occupations was found, certainly by 1851.

Within the plan of the rural village of Hetton, the location of housing provision for the colliery labour force can be recognised and explained in terms of the tenurial relationships between the Lyon estate and the coal company. Some of the earliest industrial housing in Hetton was built at Bog Row on the western edge of the old village (Fig. 3). Here on an irregular sloping plot close to Hetton burn short rows of cottages were built before 1825<sup>(24)</sup> probably to house some of the workers attracted from 1820 to the shaft sinking and associated railway construction in the parish. A similar process of the infilling of open spaces in rural villages as a means of accommodating the early workforce in nascent mining settlements has been observed in neighbouring villages such as Pitlington and Newbottle<sup>(25)</sup>. On this plot, owned by the Lyon family and leased to the coal company there were thirty seven households in 1851

occupied in twenty eight cases (78%) by coal miners. In complete contrast the sixty one neighbouring households in the old village in the 1851 census with an actively employed head enumerated a coal miner on only eighteen occasions (30%); the rest of these households were inhabited by people pursuing a wide variety of agricultural, craft and service occupations.

As well as exercising a positive influence over the location of the units of housing for the colliery labour force, the major landowners in the parish could also influence the evolution of the settlement pattern in a negative sense. Francis Mascall discouraged any development in his Great Eppleton estate whilst the joint owners of Little Eppleton township insisted in a lease agreement dated November 1820 that the company,

"were not to build any dwelling houses ... on the estate, excepting such houses not exceeding six in number as shall be necessary for the residence of the Engine and machine men."<sup>(26)</sup>

This restriction was subsequently complied with and only two cottages were constructed in the township between 1820 and 1851; they were known as the railway cottages and were built close to the Eppleton stationary engine on the Durham - Sunderland railway line, one being occupied in 1851 by an engineman and one by a waggon conductor<sup>(27)</sup>.

Whilst the foregoing examples serve to illustrate the view that the policies of landowners were instrumental in determining the broad spatial delineation of the evolving colliery landscape, it should also be noted that certain physical elements of the pre-mining landscape were responsible for the detailed morphological development of parts of the settlement. The most extreme example of the effect of the antecedent field pattern on the settlement plan is afforded by the unit of housing called Brick Garth in the south of Hetton township. Here, in an elongated field of 8½ acres with overall dimensions of 700 yards by 70 yards, owned by the Hutchinson family and leased to the coal company, miners' cottages were built rapidly after the opening of Hetton and Elmore collieries. By 1827 101 houses had been constructed on this plot<sup>(28)</sup>, a figure which had been doubled by the middle of the nineteenth century<sup>(29)</sup>. In order to maximise the number of dwellings which could be fitted into this narrow field Brick Garth was planned as a series of twenty two short rows aligned across the width of the plot, with eleven headrows disposed along its long axis. Two short rows and one headrow formed a three-sided unit of up to eighteen dwellings in the case of the complete examples facing onto a small court<sup>(30)</sup>. In this way the most efficient, if not humane use of this awkwardly shaped parcel of land for housing purposes was achieved (Fig. 4).



A somewhat less dramatic example of the influence of field shape on the subsequent plan arrangements of miners' rows is given by the series of five parallel east-west orientated terraces built in the 1820s east from Front Street in the centre of Hetton village. The shape of the field influenced the alignment of the rows as they paralleled the long axis of this rectangular enclosure; furthermore the closely-packed double rows occupied the whole width of the field.

In other parts of the parish such as Hetton Downs, the settlement pattern provides a complete contrast to these examples of the influence of plot shape on settlement form. Here the houses had been constructed by 1839 in an enclosure of twenty nine acres<sup>(31)</sup> which probably represents the original estate of twenty eight and a half acres purchased by the coal company prior to 1823. This area is shown as being undivided in the 1826 Hetton estate plan. Within this large unrestricting space the company built houses arranged in two squares, the High and Low Downs. Even by 1839 only about nine acres had been used for housing, gardens and roads, the remainder having been divided into two fields of nine and ten acres each<sup>(32)</sup>. In this part of the township there had been no necessity to maximise the available space by cramming rows of houses together: as a result the early miners' housing at the Downs assumed the form of two squares with central open spaces, one of which was occupied by a communal bake oven, together with loosely arranged separate rows.

Finally, the influence of the antecedent pattern of roads and lanes can be seen to have influenced the plan of the settlement.

The road from Houghton to Easington was lined by two rows of houses for over half a mile in the south of Hetton township so creating the community of Easington Lane initiated before 1827 by which date 180 houses are recorded<sup>(33)</sup>, the two rows paralleled exactly the gently curving course of this ancient routeway (Fig. 4). A similar relationship between street plan and a premining line of communication is illustrated by Downs Lane, the former rural track which linked Hetton village to the farms of the Hetton Downs estate. By 1856 this lane was flanked by two rows of cottages aligned precisely along its irregular course.

In summary, the location and plan characteristics of the colliery landscape in its development up to the middle of the nineteenth century would appear to owe much to the influence of the antecedent rural context. The mining settlement was rapidly created within the existing framework provided by the pattern of fields and roads, but the control exerted by the major landowners ensured that the elements of the mining landscape were not ruthlessly imposed on their properties. Instead through a series of positive and negative policy decisions the estate owners effectively influenced the ultimate form of the patterns of human activity within the parish.



## REFERENCES AND NOTES

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15. ibid, 174
16. ibid, 8, 12.
17. ibid, 18
18. ibid, 174
19. ibid, 134
20. Watson Coll. Vol. 45, 18
21. Plan of Hetton Estate c. 1826
22. Plan of the parish of Houghton-le-Spring, 1827 Durham Diocesan Record, UDDP&D. This map which was surveyed to indicate the site of the proposed chapel-of-ease at Hetton has proved very useful as it specifies the number of houses in each part of the township.
23. This percentage is derived from the entries in the census enumeration books for Hetton township 1851,
24. Plan of Hetton Estate, 1825 N.C.B. Coll. P/23 Durham CRO.
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29. The 1851 census books for Hetton record the existence of 207 separate households in Brick Garth; of the 160 households headed by a gainfully employed person, 80% were occupied by coal miners.
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FIG. 2

THE HETTON ESTATE OF THE LYON FAMILY

1776 - 1826

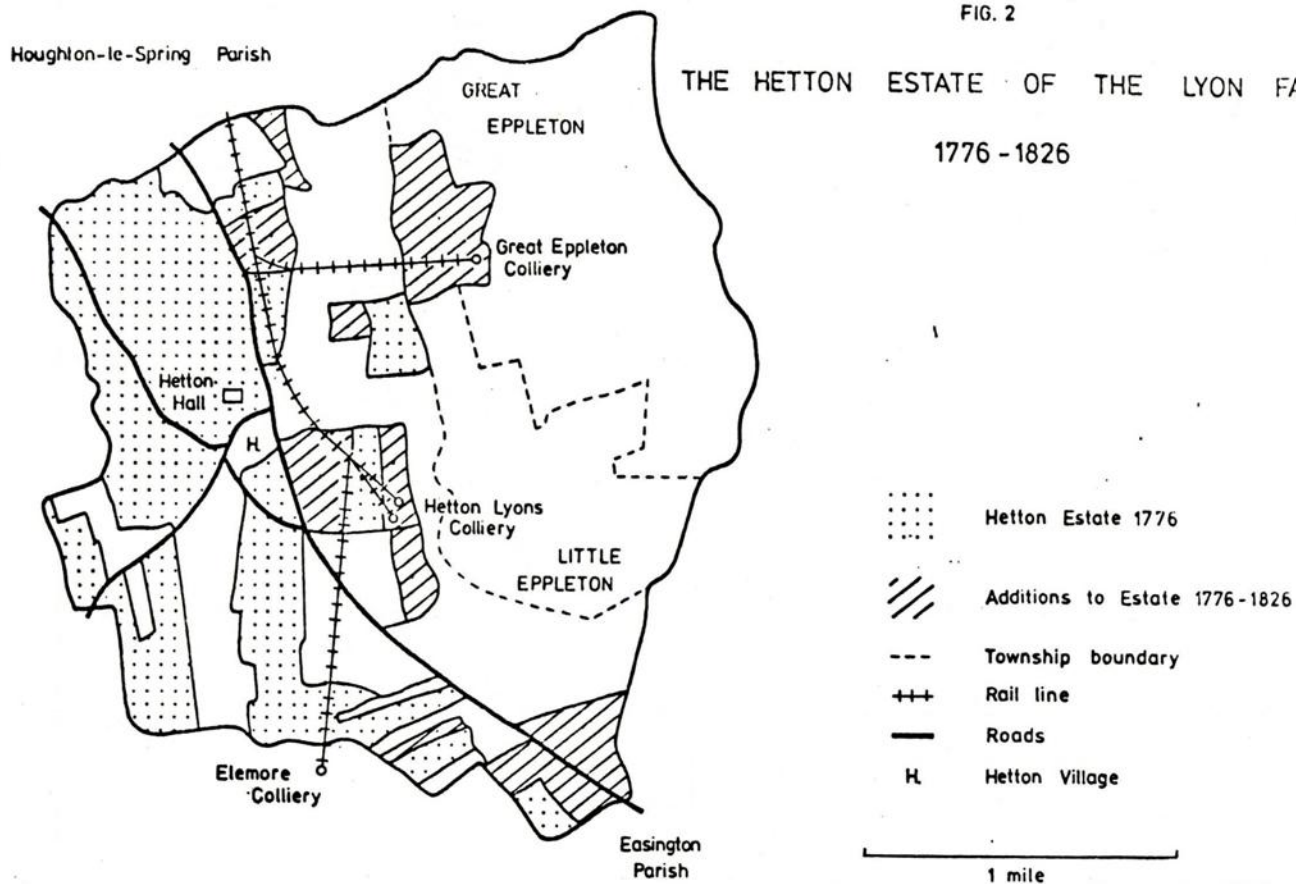


Fig.3

SKETCH PLAN OF VILLAGE, 1825

NOT TO SCALE

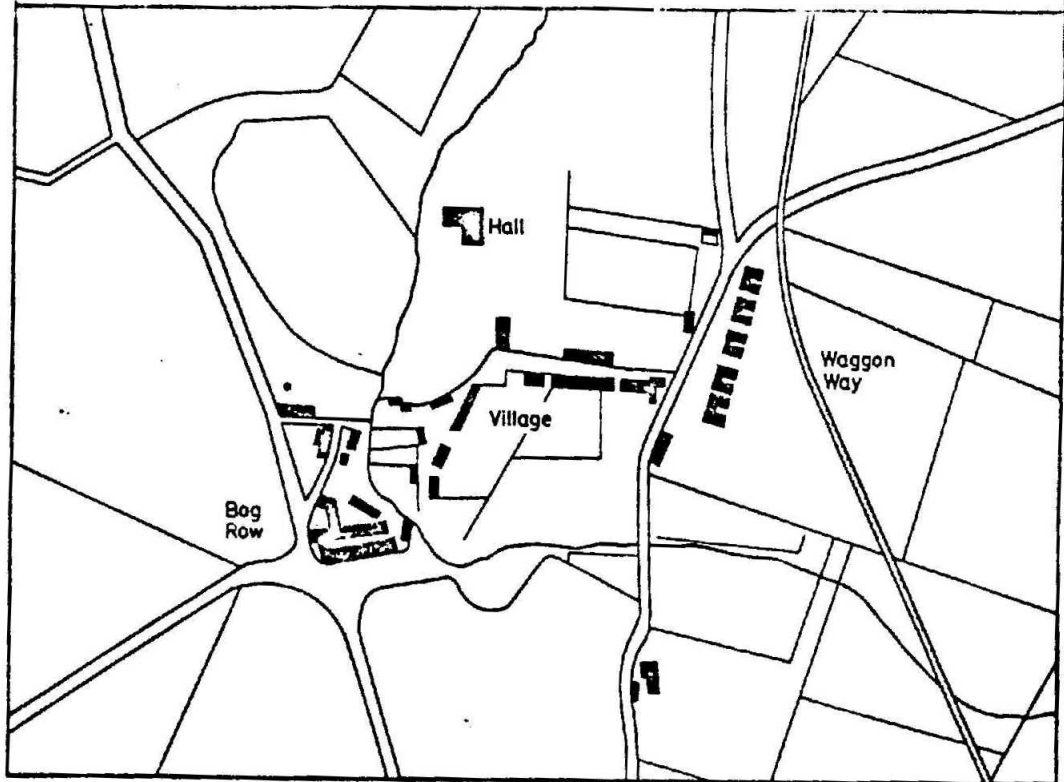


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