

## FROM PACKHORSE TO RAILWAY

Changing transport systems from the seventeenth to the nineteenth centuries and their impact upon trade and industry in the Shropshire area.

TREVOR G. HILL

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Department of English Local History.  
University of Leicester.

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TREVOR G. HILL BA(Hons), MA, ATh.

### Abstract

This thesis considers the development of transport networks from the seventeenth to the nineteenth centuries with particular reference to the county of Shropshire and its wider hinterland, which has been designated 'The Shropshire Area'.

It examines how road-transport networks evolved in the Shropshire area during the seventeenth and eighteenth centuries, and how links were formed with other areas of Britain. It questions historical assumptions which have been made about the viability of road transport systems, and explores the difficulties which can be experienced by scholars who attempt to measure the growth of carrier systems.

The development of transport on navigable rivers and canals, and their links to coastal shipping are explored and how with road-transport they formed an integrated transport system. Further it considers how these integrated networks were a factor in the development of specialized areas of production and manufacture.

In the nineteenth century Shropshire the impact of the railways on the existing road and waterway systems is studied and in particular how the evolution of new networks affected the economy, industry, culture and the population of towns and their hinterlands.

Overall this thesis takes a holistic view of local history, by placing the particular within the general and by using the study of transport systems as a unifying theme around which other socio-economic topics are explored.



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Abbreviations

SRRC	Shropshire Record and Research Centre.
T.S.A.S.	Transactions of the Shropshire Archaeological Society.

CHAPTER 1.

AN INTRODUCTION TO THE SUBJECT, THE AREA OF INTEREST,  
AND THE SOURCES AND METHODS USED.

Specialization and change in the location of industrial and agricultural production, as well as the growth and development of market centres, tend to be explored by economic historians and historical geographers but in 1991 Szostak reminded his readers that:

'There is too great a temptation, especially among economists, to ignore the spatial dimension of economic activity when looking at any time or place. Economic activity requires the movement of materials and people from one place to another ... The importance of transport cannot be over-emphasized.'<sup>1</sup>

In this thesis the historical development of transport systems between the seventeenth and nineteenth centuries is examined, with particular reference to the movement of goods rather than passengers. Further, it uses the road transport of goods, by 'carriers', as a background to the changes and developments that took place in other transport systems; river transport, canals, coastal shipping, tramways and railways. As an example of how such changes and developments may have affected economic activity in towns and their hinterlands, chapter seven explores the changing pattern of transport systems against the population and economic activity in market towns in nineteenth century Shropshire.

<sup>1</sup> R. Szostak, The Role of Transportation in the Industrial Revolution; a Comparison of England and France (1991), pp. 237-8.



The historical development of transport can be studied as systems, that is the type of transport being operated; pack-horses, road waggons, boats and barges on rivers, canals, or in coastal waters, tramways and railways. Alternatively it can be studied as networks, that is how particular routes developed which were followed by the different systems. Further it can be studied by scale, that is the quantity of goods or passengers conveyed by a given system over a given network. Within the limits of one work it is not possible to study in depth all three approaches, and therefore this thesis concentrates upon how each system created different networks, how these developed and changed, and how, to a certain extent they became integrated into a whole network.

#### The chosen period - the 17th to the 19th century.

The period chosen begins in the 17th century with the limited information that can be gleaned from The Carriers Cosmography (1637), and ends in 1870's when there is a considerable range of source material on both transport systems, industry and the trading communities in towns.<sup>2</sup> The period covers the changes in transport systems which used networks of roads, natural and man-made waterways and railways. Further, it was a period in which existing systems were upgraded by new technologies; for example road surfaces were improved by turnpiking, rivers deepened by the introduction of locks and removal of obstacles and steam motive-power was introduced on railways.

<sup>2</sup> From J. Taylor, The Carriers Cosmography (1637) to the many nineteenth century trade directories ending with Mercer and Crocker's General, Topographical and Historical Directory for Shropshire (1877).



Apart from the changing pattern of transport networks in this period, there was a growth in specialized areas of industrial production. For example, the development of the iron industry in central Shropshire and the Black Country, steel making in Sheffield, corn growing in East Anglia and cheese production in Cheshire and north Shropshire. When Daniel Defoe and Celia Fiennes travelled across Britain in the late 17th and early 18th centuries they both commented upon areas of specialization, the latter on arrival in Exeter wrote of the cloth trade: 'as Norwich is for coapes callamanco and damaske soe this is for Serges - there is an incredible quantety of them made and sold in the town;' She then discusses the serge manufacturing process and comments on the marketing of the cloth 'some they dye but the most are sent up for London white'<sup>3</sup>

However, throughout this period these areas of industrial specialization did not remain constant, as new technologies created new methods of production, so new areas emerged to dominate a particular trade, for example, woollen production moved from Norwich and Exeter to Yorkshire.<sup>4</sup> This growth of

<sup>3</sup> C. Morris, (ed), The Journeys of Celia Fiennes (1947), pp. 245 -247. When in Norwich she also comments upon the type of cloth produced and it is clear that what in Exeter she calls coapes refers to crapes and callamanco to calico,

<sup>4</sup> In the iron industry, production centres which had first developed in areas such as the Sussex Weald and Forest of Dean, where blast furnaces had been built in close proximity to ore deposits and charcoal supplies, moved to coalfield areas after the introduction of smelting ore with coke. Other improvements such as the Cort's 'reverberatory furnace' in 1784 and Bessemer and Siemens 'converter' and 'open hearth' furnaces in 1856 affected the location of iron and steel works because lower grade ores could be utilized, for example the use of Cleveland ores resulted in the growth of the new town of Middlesbrough.



areas of specialized production created a demand for transport networks to link production areas to their markets, and it can be argued that this caused a radical change in transport systems and produced what was, in effect, 'a transport revolution'. Duckham in a pamphlet published in 1967 entitled The Transport Revolution, 1750-1830 appears to have promulgated this concept. The author was clearly influenced by the views of the time; that radical economic changes took place within short time-scales, and that there were specific periods of economic change such as the 'Agricultural Revolution' and the 'Industrial Revolution'. In his opening statement he said:

'The period 1750-1830, traditionally marking the classical industrial revolution, achieved in Great Britain what Professor Rostow has called the economy's "take-off into sustained growth". A revolution in transportation was part of the complex of changes - industrial, agricultural, mercantile and commercial - occurring roughly concurrently... The impact of better communication, like the consequences of the factory system it helped to sustain, has been a powerful force in shaping our modern society... Though the extra-economic effects only became really obvious with the railway age, the "transport revolution" began that quickening of the pace of life which broke decisively with the slower rhythms of earlier centuries.'<sup>5</sup>

Duckham suggests three components that supported his argument for a 'Transport Revolution'.

- 1) The improvement of roads through turnpike trusts, the new technologies of McAdam and Telford and the betterment of the postal services.
- 2) The improvement of river navigation and the building of a canal network that linked areas of growing industrialization together, and with vital coal supplies.

<sup>5</sup> B. F. Duckham, The Transport Revolution, 1750-1830. Historical Association 'Aids for Teacher Series' No 14 (1967).



3) The establishment of docks and harbours to facilitate international trade at ports such as London, Glasgow, Hull and Bristol.<sup>6</sup>

Some of these factors are explored in this thesis, but whether the changes in technology were fast enough to warrant the term 'revolution' is open to question. As will be demonstrated below, the pace of change varied from place to place. For example, the use of pack-horse trains in the more mountainous areas of the Welsh borderland continued into the early nineteenth century, whereas in other places, there existed waggon, canal-boat and tramway networks. Some road-carrying firms like Pickfords began their business with pack-horses, extended it by the use of waggons, and through time diversified into waterway transport, and finally becoming carriers for the railway, as will be demonstrated below <sup>7</sup>

#### The relationship of this thesis to the work of other scholar's.

Prior to the writings of Duckham it had been made clear from the seminal work of T. S. Willan that, in spite of the limitations of the source material, some complex transport

<sup>6</sup> Duckham, The Transport Revolution, pp. 13-15.

<sup>7</sup> I am obliged to Julia Bunting of Chesterfield who kindly supplied me with a number of articles she had written for the Peak Advertiser on Pickfords and the lime industry of Derbyshire, including one entitled 'To peaks of fame: the Pickford Name.' (July 1997). This article suggested that the founder of the firm of Pickford could be a William Pickford who, around 1630, operated as a carrier in the Poynton area. This suggested a somewhat earlier date for the foundation of this firm than the date that was established by Turnbull who commented that 'the earliest hard evidence is an advertisement in the Manchester Mercury, in August 1756. G. L. Turnbull, Traffic and Transport: An Economic History of Pickfords, (1979).



networks did appear to exist in the sixteenth-century. In his book The Inland Trade, he commented upon the relationship of bulk, weight and value in the transport of goods by waterway, sea or road. For the latter, he pointed to the growing number of printed road-tables from 1541 which included initially details of routes radiating from London, and which suggested a road carrying network. He commented upon the growth of cross-routes, such as those which radiated from 'Bristol to Oxford, Cambridge, Southampton, Shrewsbury and Chester.'<sup>8</sup>

Willan referred to the movement of passengers and goods, and how industry was already a driving force in the development of transport networks. He linked his research into road transport networks with the rivers and coastal networks which he had explored in his earlier works.<sup>9</sup> As will be shown in chapters two and three, below the pre-existence of road and waterway transport networks before the seventeenth century in Shropshire and the surrounding area can also be demonstrated.

Since Willan's survey of inland transport, other scholars have shed further light upon the development of road transport networks. Everitt, Chartres, Hey, Turnbull, and Gerhold on the development of carrier routes.<sup>10</sup> In Shropshire, Evason and

<sup>8</sup> T. S. Willan, The Inland Trade (1976), pp. 1-2.

<sup>9</sup> T. S. Willan, The English Coasting Trade, 1600-1750 (1938); T. S. Willan, River Navigation in England, 1600-1750 (1936).

<sup>10</sup> Works such as, A. Everitt, 'Country Carriers in the Nineteenth Century', Journal of Transport History, New Ser. vol III, No. 3 (1976); and J.A. Chartres, 'Road Carrying in England in the Seventeenth Century: Myth and Reality', Economic History Review, 2nd ser. vol. XXX (1977). The works of many of the scholars mentioned above will feature in the following chapters.



Marsh researched Shrewsbury carriers in the nineteenth century, Evason also researched Shropshire coaching routes and Clarke has studied turnpike roads.<sup>11</sup>

Other researchers such as Wanklyn, Wakelin and Hadfield have extended our knowledge upon waterway systems and the works of Christiansen and Holt have shed valuable light upon the development of the railway networks.<sup>12</sup> Carter and Lewis and scholars of the Open University have studied the economic function of towns and Ashton, Mathias, Trinder and Stamper have researched the development of specialist industrial and agricultural areas.<sup>13</sup> The results of such research form the academic base upon which this thesis has been built.

#### The area of research.

The core area of this study is the county of Shropshire. This county was set within a landscape that had a dynamic mixture of agricultural and industrial areas, and in which a

<sup>11</sup> C. Evason and P. Marsh in B. Trinder (ed), Victorian Shrewsbury; Studies in the History of a County Town (1984); J. S. Clarke, 'Turnpike roads in Shropshire; part of the development of communications in the West Midlands,' unpub. M.A. dissertation, University of Leicester, Department of English Local History, (1997).

<sup>12</sup> Works such as, R. Christiansen, A Regional History of the Railways of Great Britain, vol. 7, The West Midlands (1973). C. Hadfield, The Canals of the West Midlands (1969). A. P. Wakelin 'Pre-industrial trade on the river Severn, unpub. PhD thesis, Wolverhampton Polytechnic (1991). M. D. G. Wanklyn, 'The Severn Navigation in the Seventeenth Century: Long-distance trade of Shrewsbury Boats,' Midland History XIII, (1988).

<sup>13</sup> Works such as: H. Carter & C. R. Lewis, An Urban Geography of England and Wales in the Nineteenth Century (1990): The Open University Course Units for Historical Sources and the Social Scientist (D301), (1983); T. S. Ashton, The Industrial Revolution, 1760-1830 (1949, 1980 edn.); P. Mathias, The First Industrial Nation (1969, 1983 edn.). B. Trinder, The Industrial Revolution in Shropshire (1981), and P. A. Stamper, The Farmer Feeds us All (1989).



considerable amount of research has been undertaken on the themes of the 'Industrial Revolution' and 'River transport systems'.<sup>14</sup>

In an earlier study of the Shropshire town of Shifnal, it had been noted that the basis for this town's economy in the early-nineteenth century, was an increasing trade created by long-distance road transport. However, the opening of the railway virtually destroyed this trade, and had a marked affect upon the economy of the town.<sup>15</sup> Further, an earlier study had considered the changing populations and trading function of towns on the Shropshire-Cheshire Plain in the mid-nineteenth century.<sup>16</sup> Both studies had raised questions about the likely affect of changing transport systems on small town populations and their economic base and consequently Shropshire appeared to be a suitable area of study.

Shropshire, like its southern neighbour Herefordshire, is a large county whose population looks eastward into England and westward into Wales (Figure 1.1). In 1850 Shropshire covered 858,240 acres compared to Herefordshire's 552,320 acres. The county is described in Slater's Directory as:

'In length from north to south, it is about forty-five

<sup>14</sup> One thinks for example of the writings of Trinder such as The Industrial Revolution in Shropshire (1981), and the research using the 'Port Books' on the River Severn by M. Wanklyn and A. P. Wakelin at Wolverhampton University.

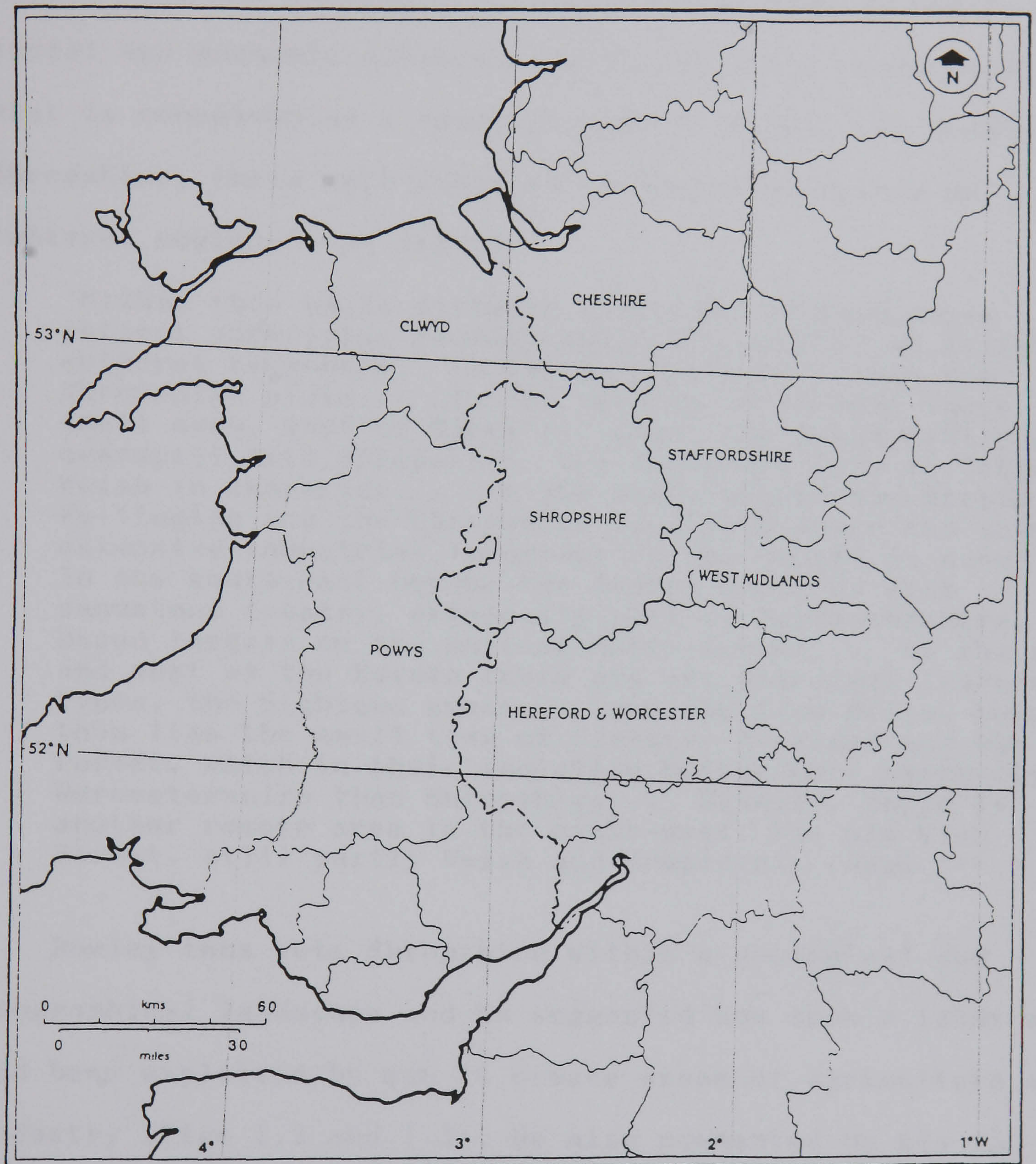
<sup>15</sup> T. G. Hill, 'The trading community of Shifnal and its geographical and genealogical linkages; a case study, 1841-1861.' unpub. M.A. Dissertation, University of Leicester, Department of English Local History, (1988-89).

<sup>16</sup> T. G. Hill, 'Changes in population and status of market towns on the Shropshire-Cheshire Plain, 1800-1840'. unpub. Open University Project Report for the course 'Historical Sources and the Social Scientist' (D301) (1984).



Figure 1.1

## SHROPSHIRE • COUNTY LOCATION



Copied from: Shropshire County Council, Education Committee,  
The Shropshire Atlas; a set of maps to help support the National  
Curriculum - Geography, Cartography by S. R. Davies (1991).



miles; and its extreme breadth about thirty five; its circumference is computed at one hundred and sixty miles comprising an area of 1,341 square miles... In size it ranks as the fifteenth English county, and in population as the twenty fourth.'<sup>17</sup>

A county is however a man-made construct, primarily a division of land for administrative purposes. Apart from its geographic shape, size and land-form, a county is an area in which varied social and economic sub-areas developed which could overlap what is conceived as a county boundary. Within the county of Shropshire, there were areas which Rowley describes as "natural regions". He writes:

'Within this basic division a variety of landscapes reflect underlying geology and soils as well as different cultural responses. To the north of the Severn the Shropshire plain... To the extreme north-west there is a small area, west of Oswestry, where the Denbighshire hills overspill into Shropshire. The landscape here is largely Welsh in character... To the east, beyond the Wrekin, lie Wellington and the Shropshire coalfield where the only extensive industrial landscape in the county is seen ... In the south-east beyond the Severn there is rich sandstone country, originally part of Worcestershire, based largely on the ancient Morfe Forest... To the south and west of the Severn there are two principal landscape types, the highland areas ... and the Clee Hills, beyond them lies the small town of Cleobury Mortimer and the Wyre Forest, which in their isolation belong more naturally to Worcestershire than Shropshire ... Finally, there is another remote area in the south-west, the old Clun Forest, still partly Welsh and completely rural.'<sup>18</sup>

Rowley thus sets Shropshire within a geological and geographical landscape and he suggested how such a landscape had been exploited by man to create areas of agriculture and industry (Figs 1.2 and 1.3). He also commented on how the population of some areas looked towards other counties; west from Oswestry and Clun to Wales, and south east from the Wyre Forest to Worcestershire.

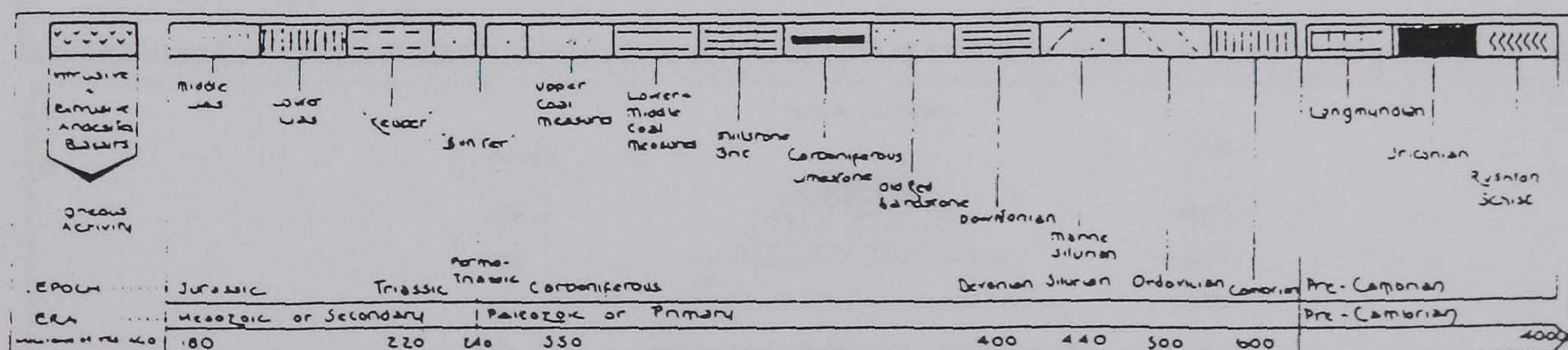
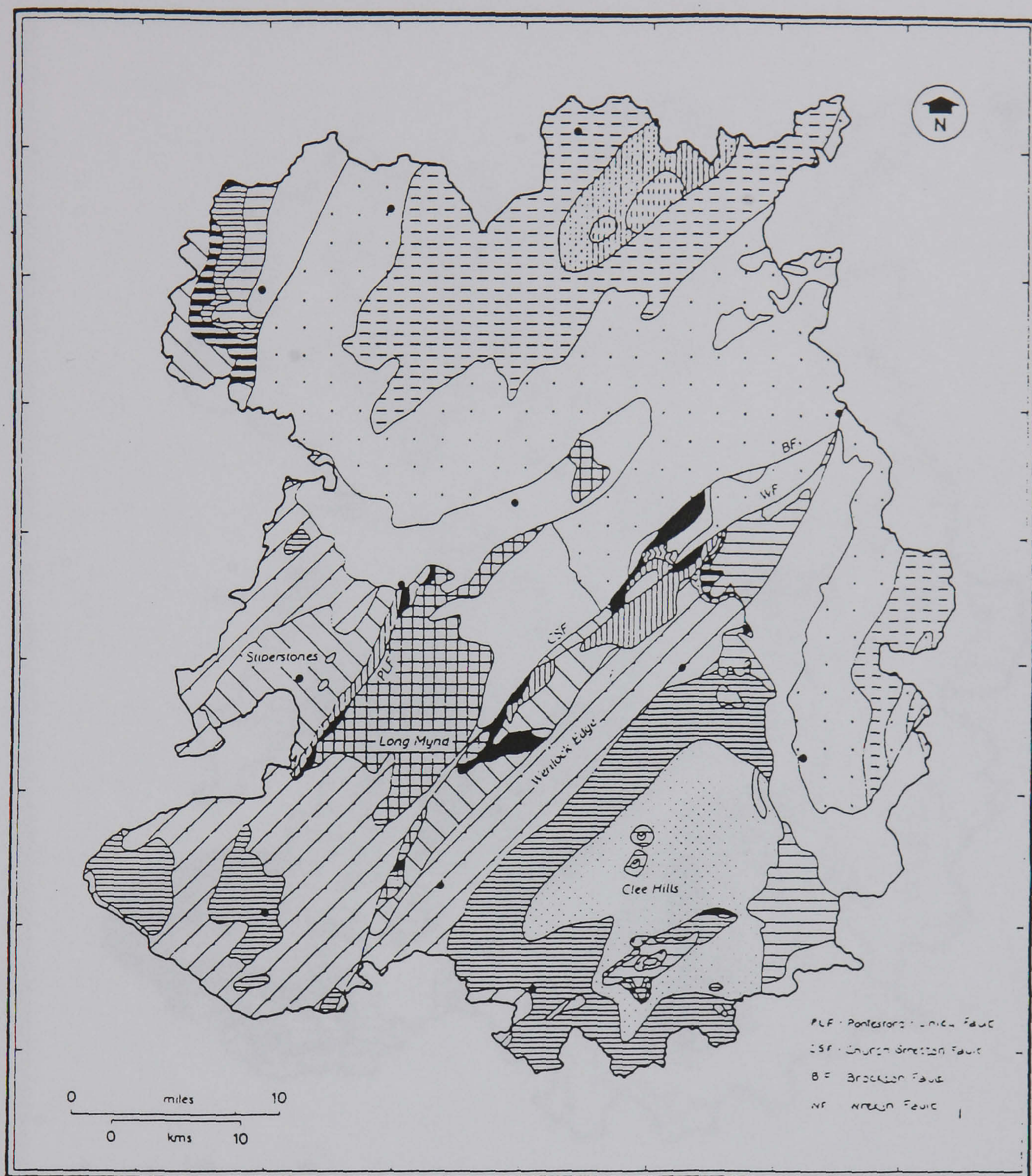
<sup>17</sup> Slater's (late Pigot & Co.), Royal, National, Commercial Directory and Topography (1850).

<sup>18</sup> T. Rowley, The Shropshire Landscape (1972), pp. 21-22.



Figure 1.2

# SHROPSHIRE • GEOLOGY

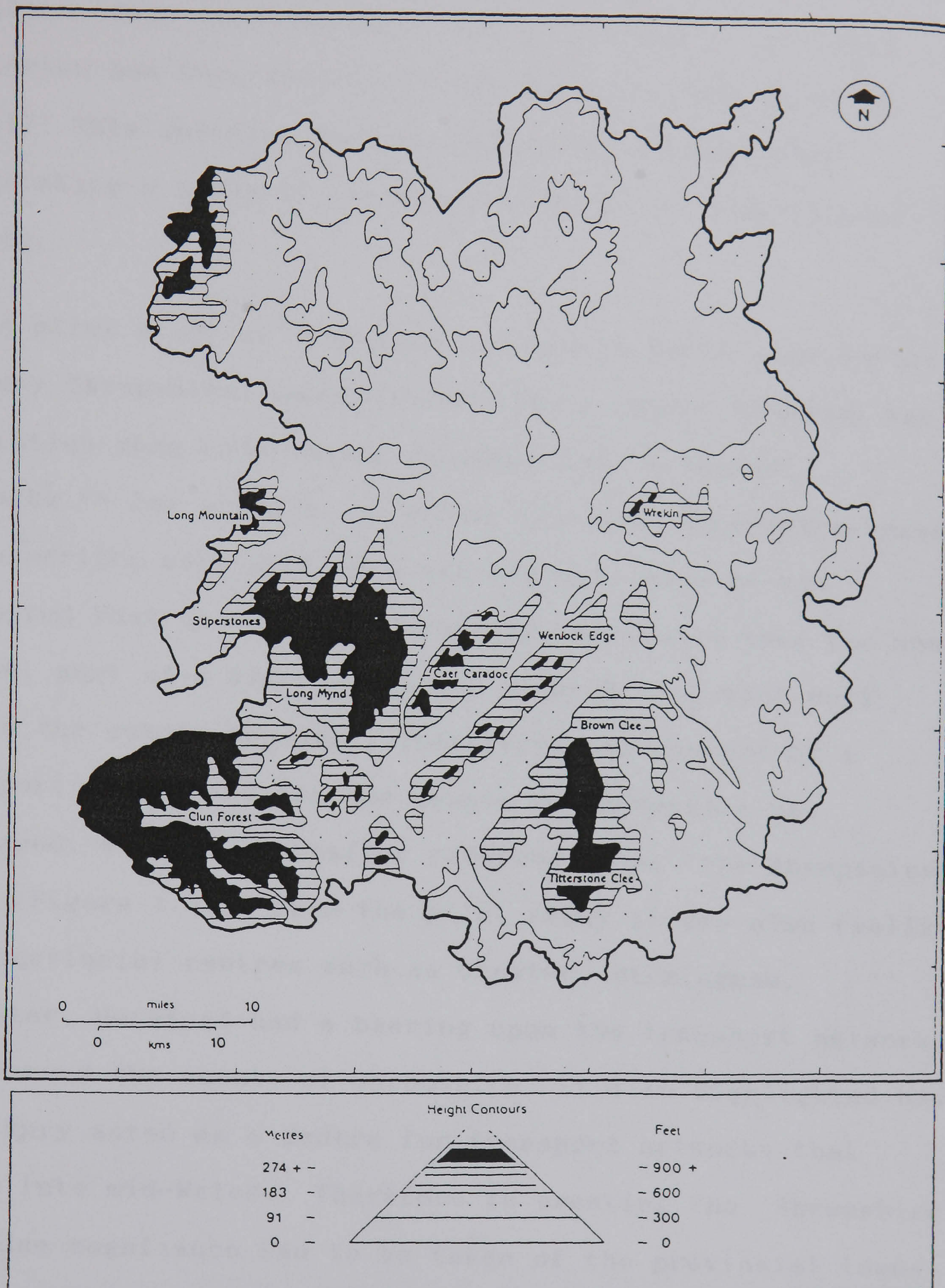


Copied from: Shropshire County Council, Education Committee,  
The Shropshire Atlas; a set of maps to help support the National  
Curriculum - Geography, Cartography by S. R. Davies (1991).



Figure 1.3

# SHROPSHIRE • RELIEF



Copied from: Shropshire County Council, Education Committee,  
The Shropshire Atlas; a set of maps to help support the National Curriculum - Geography, Cartography by S. R. Davies (1991).



This thesis is set within the discipline of Local History. Since the days when Hoskins brought 'historical landscapes' to our attention; Finberg introduced the concept of 'pays'; and Phythian-Adams used the term 'societal areas'; the local historian has been faced with the question 'how local is local?' This question becomes especially focused when undertaking a study of transport networks of a particular county.

A pilot study of transport systems in early nineteenth-century Shropshire, demonstrated that a county boundary was a limitation when undertaking research into transport networks.<sup>19</sup> For example, it showed how some Shropshire-based road-carriers were part of a country-wide network and suggested that as canals and railways developed they too would become, part of a wider transport network that went well beyond the county boundary. Therefore, the concept of a transport hinterland for the county of Shropshire was developed, which is hereafter referred to as 'the Shropshire Area' (Figure 1.4). From the pilot study it was also realized that provincial centres such as Chester, Birmingham, Worcester, Hereford had a bearing upon the transport network that served the county of Shropshire. It also highlighted how Shrewsbury acted as a centre for transport networks that spread into mid-Wales. Therefore in creating the 'Shropshire Area' due cognizance had to be taken of the provincial towns mentioned above and the towns of the Potteries area around Stoke-on-Trent. These towns provided an transport envelope to

<sup>19</sup> This pilot study was based primarily upon an examination of the routes followed by carriers as recorded in Pigot & Co., London & Provincial New Commercial Directory (1822-3) both in Shropshire and beyond its boundary.

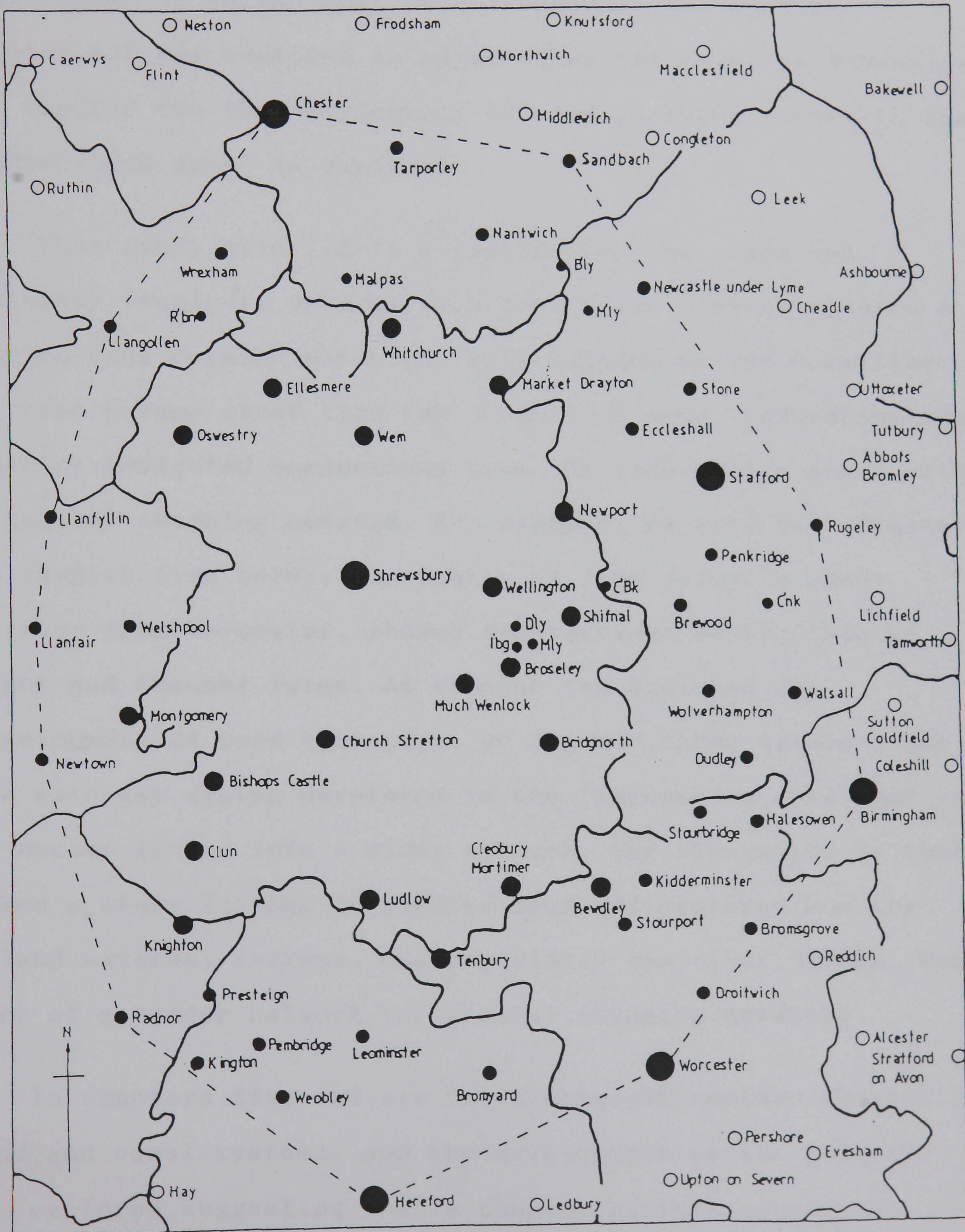
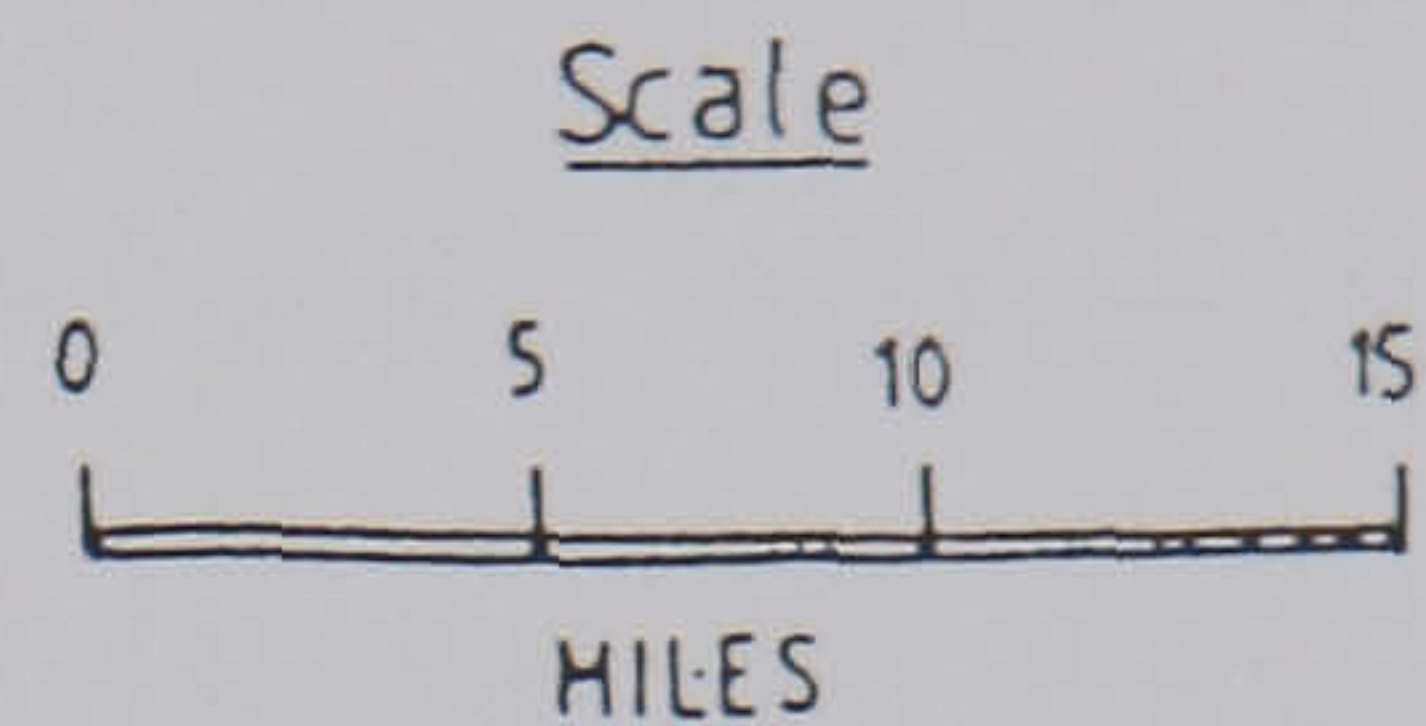


Figure 1.4

## The Shropshire Area

Area boundary - - - - - County boundary ————

County or major towns ● Greater Shropshire towns ●  
Shropshire Area towns ● Other carrier calling points ●





the north, east and south but it was realized that there was a paucity of data on transport systems in Wales. Further, because of the complications caused by the mountainous terrain, a study of transport networks in Wales would be a specialized subject in its own right. Therefore, apart from comments in the text, which will apply to routes to the west-coast of Wales, most of the analysis the western hinterland was confined to adjacent market towns in Mid-Wales. In chapter two the development of road carrying routes in the 'Shropshire Area' is explored.

This study also led to a realization that road and waterway transport systems from provincial centres created a nation-wide network which was only bounded by the coastline. It also became clear from the study that some trade-directory entries indicated connections from the 'Shropshire Area' with a coastal shipping network. For example, as will be indicated in chapter five below, the routes of John Jolly, a road-carrier from Worcester, showed destinations in the Isle of Wight and Channel Isles. As chapter two explored the development of road transport, so chapter three examines how the waterway system developed in the 'Shropshire Area' and how it became linked into a wider network. The discussion is then taken a stage further in chapter four and explores how the inland waterway systems, and especially the river Severn, were part of a feeder network for coastal shipping networks.

In chapters five and six the nineteenth century changes in road and canal systems, and the development of the railway, are explored suggesting that a complex picture apparently resolved itself into an integrated network throughout the



'Shropshire Area'. Finally in chapter seven an in-depth study is undertaken of the probable effect of changing transport networks on the population and economic life of towns and their immediate hinterlands. However, because it was a large topic it was limited in area to a study of the towns in the core area, the county of Shropshire.

The county of Shropshire - The towns and areas which are discussed in chapter seven.

The Imperial Gazetteer of England and Wales (circa 1867) indicated, that about 92% of the county area of 858,240 acres was used for highly productive agriculture. It recorded that:

'About 790,000 acres are either arable land, meadow or otherwise profitable. The soils are prevailing light and sandy in the north, and loamy or clayey in the middle and generally fertile. The chief crops are wheat, barley, pease, turnips and grasses; and subordinate crops in some places, are oats and hops. The arts of culture are good on the large farms but backward on many small ones. The meadows near the Severn are very fertile. Excellent dairies are in the parts nearest the great towns of Staffordshire, but the dairies in other parts are inconsiderable. The cattle reared for the market are of the improved Leicester, Lancaster and Cheshire breeds; and those of the dairy lands are of mixed breeds. The sheep are generally of no particular breed, yet include a peculiar horned kind similar to the Southdown; and they amount to about 42,000 and yield about 7,000 packs of wool. Horses of good quality, but no particular breed, are reared for the yoke and the saddle. Large hogs are fattened, and turkeys bred. Many fine orchards are in numerous parts, particularly in the south; and plantations of oak, ash, and beech are aggregately considerable. Estates and farms, in general, are well divided; but some are very small.'<sup>20</sup>

This statement clearly indicates how agricultural production was a major part of the Shropshire economy. In north Shropshire the farming method resembled Cheshire with its predominance of agricultural pastoralism. Stamper states how 'In the 16th and 17th centuries Shropshire's agriculture remained predominantly

<sup>20</sup> J.M. Wilson, The Imperial Gazetteer of England & Wales, vol. VI (1867), p. 806.



pastoral, although arable production did increase with the enclosure of commons, wastes and open fields...' but how 'In the following century north Shropshire's dairy industry grew alongside Cheshire's to national prominence, and by the 1720's "great quantities" of Cheshire cheese were made not only in Cheshire but in the adjoining parts of Shropshire, Staffordshire and Lancashire too.'<sup>21</sup>

Apart from agriculture the extraction of minerals was also an important factor in the development of industry in Shropshire and consequently its transport requirements (Figure 1.5). For example the towns of Oswestry and Ellesmere were situated near the Ruabon coalfield, and as will be shown in chapter three, this coalfield was eventually linked to the river Mersey by the Ellesmere canal. In another part of Shropshire the industrial developments on the East Shropshire coalfield supported the towns of Wellington, Shifnal, Bridgnorth, Madeley, Broseley and Much Wenlock. Apart from coal, the area also contained ironstone, limestone and clay suitable for pottery. Situated in this coalfield area was Coalbrookdale, which became famous for its iron industry based upon the development of iron-smelting by coke.

The Imperial Gazetteer also commented on how an industrial economy existed alongside agriculture in many districts of Shropshire:

'Coal exists in seams sometimes 6 feet thick; and in 1859 was worked in 59 collieries, with an annual output of 765,750 tons. Ironstone is found in the same tracts as the coal and in 1859 yielded 149,480 tons of ore and was worked in 37 furnaces and 14 ironworks. Lead ore, calamine, and traces of copper ore occur in the west. Limestone of a quality resembling marble, is

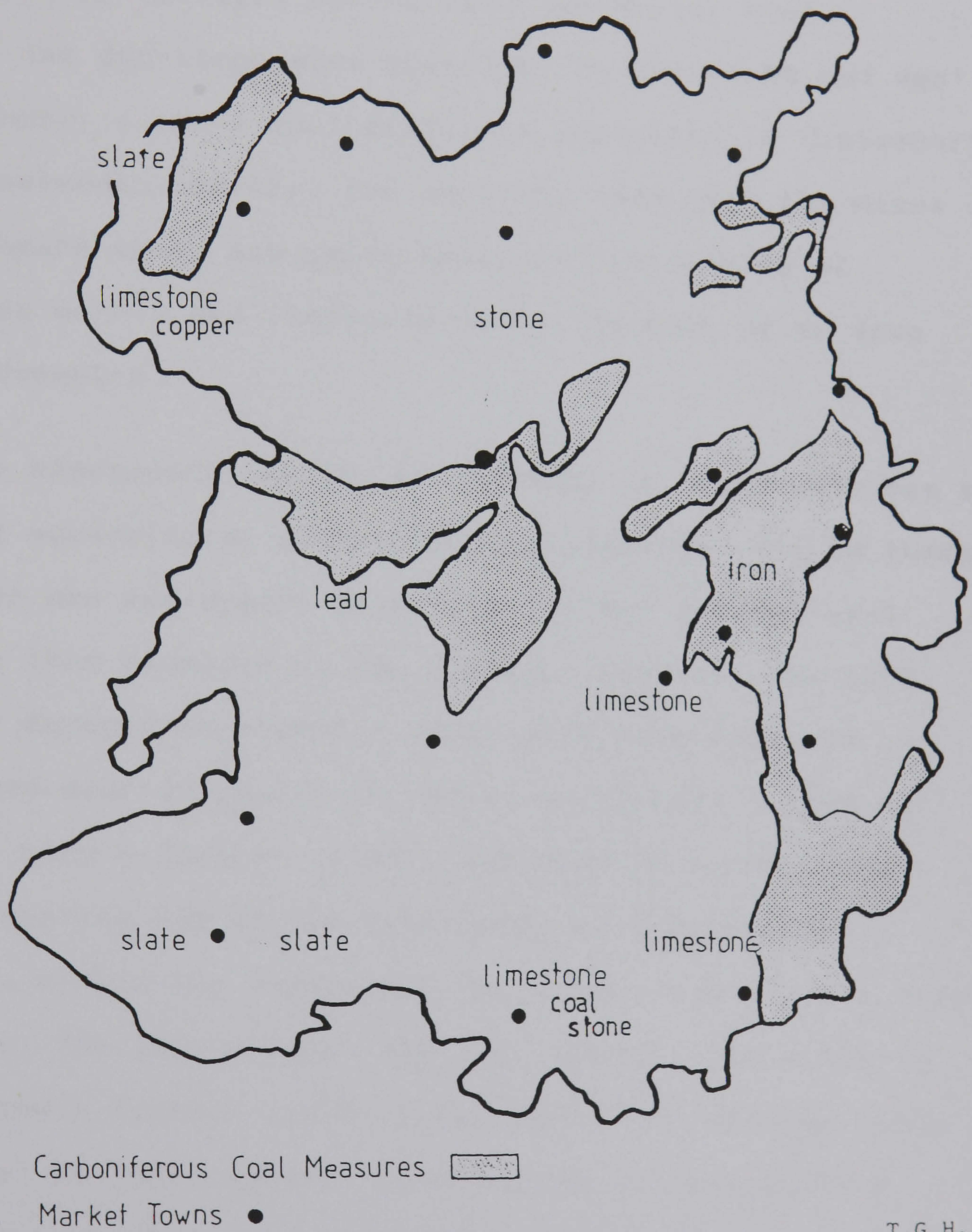
<sup>21</sup> Stamper, The Farmer feeds us. p. 38.



Figure 1.5

SHROPSHIRE

The Industrial and Mineral Areas





quarried near Oswestry, Ludlow, and Orton; slate at Selattyn, Purslow and Clun; and good building stone at Grinshill and other places... The mineral trade, is extensive; and manufactures of earthenware, porcelain, glass, flannel, linens, linen thread, buttons, nails, hardware, gloves, and paper are elsewhere considerable.'<sup>22</sup>

Several lesser coalfields were also mined; to the south of Bridgnorth, along the Severn Valley, Highley, and Billingsley became colliery villages and on the Clee Hills, coal, limestone and dhu-stone were quarried. To the south and west of Shrewsbury, a small coal-field was exploited in Pontesbury, in the nineteenth century, for smelting lead from the mines of the Snailbeach area, and apart from coal the mining of non-ferrous metals and limestone were a feature of an area south of Oswestry.

In the nineteenth century the economy of the county was a mixture of agricultural production and industry, but in terms of manpower and employment potential, it was agricultural production that remained as the dominant feature. The 1851 census for Shropshire showed a total male work-force of 66,782, aged over 20 years. Of these, 4,771 were listed as 'farmers'; with a further 21,987 'employed in agriculture'. This representing 40% of the total male work-force. By comparison, within the industrial sector there were only 3,148 coal miners, 784 iron miners, 286 lead miners, 492 stone quarriers and a further 1,678 listed under the heading 'iron manufacture' or 'nail makers'. The industrial occupations therefore represented only 10% of the male work-force. <sup>23</sup>

<sup>22</sup> Wilson, Imperial Gazetteer p. 806.

<sup>23</sup> Irish University Press, British Parliamentary Papers, 1851 Census, England and Wales, vol.1 (1970) p. 485.



The location and distribution of market centres has been the subject of academic debate for a number of years. In a paper entitled 'Development of towns and market places: England', Fox commented that Henry de Bracton, a thirteenth century lawyer, stated that the expected distance between market towns would be about 6.7 miles (10.7 Km.) or as de Bracton wrote: 'six miles and a half and the third part of a half.'<sup>24</sup>

An analysis of the distance between nineteenth-century market towns on the Shropshire-Cheshire Plain, and their probable hinterlands, produced a mean distance between them of 8.5 miles (13.7 Km.). However, as Figure 1.6 demonstrates, when the assumed hinterlands were mapped as circles, this mean distance left considerable areas which were apparently not covered by a market centre.

The road pattern, and location of market towns in Shropshire and its surrounding area, suggests an element of organization and planning. It will be noted from Figure 1.7 that some towns were located on the county boundary with towns such as Newport, Whitchurch and Ludlow having hinterlands partially in neighbouring counties. On the other hand, towns such as Knighton and Montgomery in Wales, or Tenbury in Worcestershire, had hinterlands which covered some areas of Shropshire.

The location and pattern of market towns has also interested geographers, and a number of different models have been used as a basis for study. Among these was an influential

<sup>24</sup> H.S.A. Fox, 'Development of towns and market-places: England.' Existics, vol. 31, No 182 (1971), p. 48.



Figure 1.6

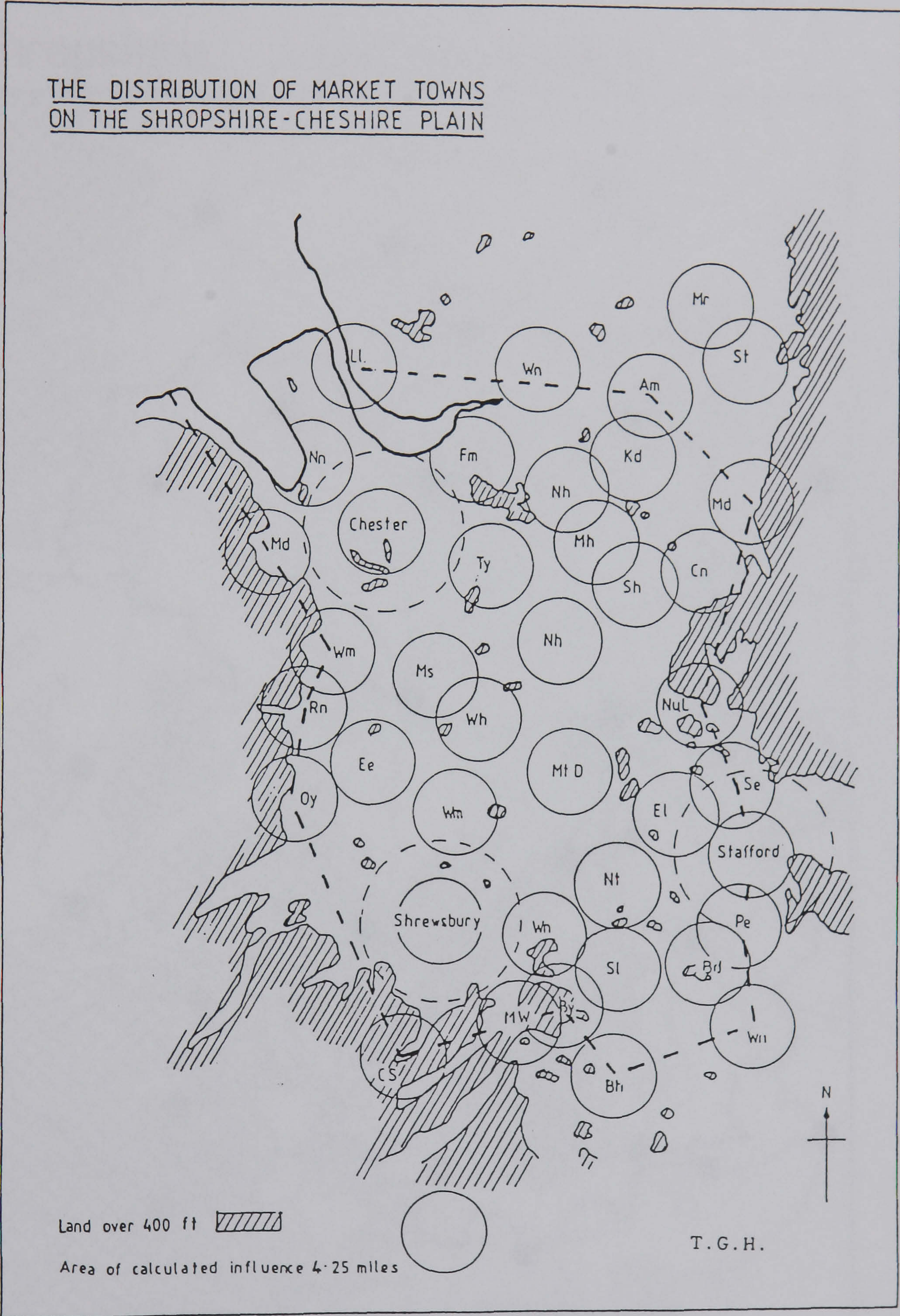
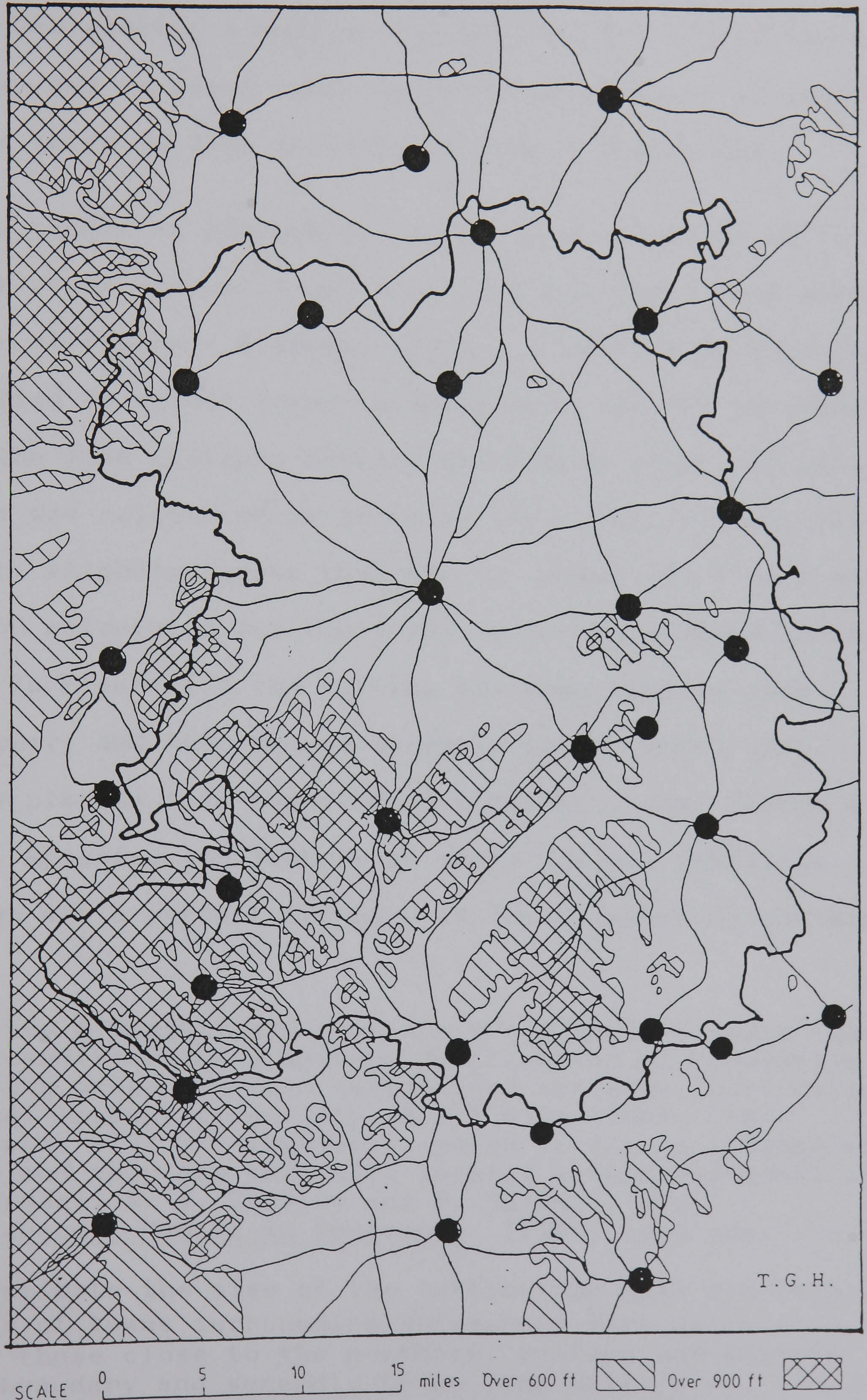




Figure 1.7

# Shropshire

## MARKET TOWN DISTRIBUTION





model was created by Christaller. This evolved from his 'general deductive theory' which he formulated to explain the size, number and distribution of towns on an isotropic land surface, and is referred to in Chorley and Haggett's book entitled: Socio-Economic Models in Geography.<sup>25</sup> In this thesis one of Christaller's models, called the 'K = 3 settlement pattern' and is based upon marketing principles, is used in chapter seven to help delineate a town's hinterland.

The county of Shropshire, with its surrounding hills and a major river system is not a perfect isotropic land surface. However as Figure 1.8 shows, the k = 3 lattice pattern can be applied to market towns in Shropshire and the surrounding area. The mean distance between the centre points of each hexagon was calculated as 10 miles (16.1 km.).<sup>26</sup> This was however, slightly larger than the 8.5 miles (13.7 km.) which had been calculated for the towns on the Shropshire-Cheshire Plain. In Figure 1.8 the lattice has been centred upon Shrewsbury, and then skewed slightly to the north-east, thereby placing five towns, Market Drayton, Wem, Bishop's Castle, Knighton and Tenbury in their correct positions. Although not a perfect fit many of the hexagons do contain one

<sup>25</sup> Chorley & Haggett add that the k = 3 model assumes that 'under conditions of a uniform distribution of population and purchasing power, uniform terrain and resource localization, and equal transport facility in all directions.' that settlements will be 'regularly spaced to form a triangular lattice and they are centrally located within hexagonal shaped trade areas'. R. J. Chorley and P. Haggett, eds, Socio-Economic Models in Geography (1967, 1968 edn.), p. 307.

<sup>26</sup> To estimate the size of the lattice the mean distance of two sets of towns surrounding Shrewsbury were calculated. Firstly those close to the northern, western and eastern county boundary and secondly those like Wellington, Wenlock and Stretton which appeared to create an inner ring.

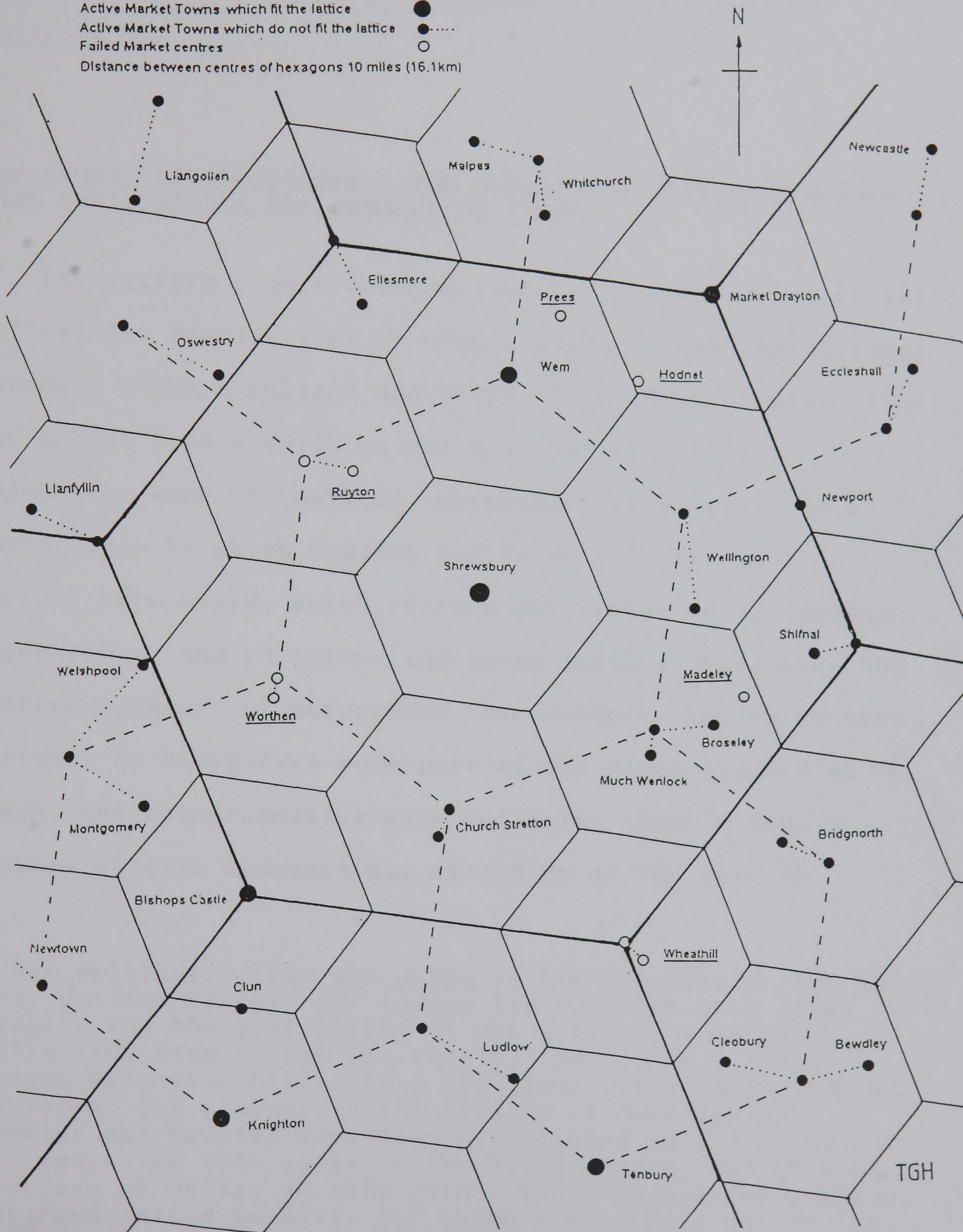


Figure 1.8

# THE SCHEMATIC LAYOUT OF SHROPSHIRE MARKET CENTRES

Based upon Christaller's Marketing Principle,  $K = 3$   
Showing regular lattice model with nesting hexagons

- Active Market Towns which fit the lattice ●
- Active Market Towns which do not fit the lattice ●.....
- Failed Market centres ○
- Distance between centres of hexagons 10 miles (16.1km)





centrally placed market town or, as will be discussed in chapter seven, a village that had served as a market-centre. However some towns, like Wellington, Ludlow, and Clun are located well away from the central point, and reasons other than mere distance need to be sought to explain their position.<sup>27</sup>

The county of Shropshire - The social and cultural factors that could affect the economy of towns.

The western county boundary, which in some instances still follows the Mercian line of Offa's Dyke, became the national boundary between England and Wales. This administrative line cut across both a cultural and a social area whose boundaries were ill-defined. Shropshire is a county in a border area in which English and Welsh culture and society were mixed. Welsh culture was reflected in language, place-names, and religion, and these factors overlapped the western boundary of Shropshire. For example, the north-west parishes of Shropshire were part of the Welsh diocese of St. Asaph, and Welsh-speaking non-conformist chapels were a feature of some communities, extending as far east as

<sup>27</sup> For Wellington this was probably its location on the Roman road, Watling Street; for Ludlow its position on a river crossing and the suitability of the site for a medieval castle; for Clun it was its castle location in a valley between extensive hills. In a few cases extra market towns developed, for example in the hexagon of Much Wenlock, Broseley and Madeley were also established only 2 miles (3 km.) apart, on both sides of the River Severn. Before 1781 there was no bridge at this point. Three Shropshire hexagons contained failed markets, for example Wheathill was granted a charter for a market on a Thursday and a fair in 1299/1300 but Bagshaw records that they have long been obsolete. The analysis of town and market village locations and a revised method of calculating their hinterlands is discussed in chapter 6 below.



Shrewsbury. When Daniel Defoe wrote in the 1720's of his earlier visit to Shrewsbury he commented:

"This is a town of mirth and gallantry, something like Bury St. Edmunds, or Durham in the north, but much bigger than either of them, or indeed than both together. They speak all English in the town, but on market-day you would think you were in Wales. Here is the greatest market, the greatest plenty of good provisions, and the cheapest that is to be met with in all the western part of England;'<sup>28</sup>

His comments indicated how culturally as well as economically there were strong links between mid-Wales and Shropshire in the early eighteenth century.

Just as the western border of Shropshire contained a mixture of cultures so, to some extent, did the other border areas. In east Shropshire local accents suggest that historically the population were more akin to the people of Staffordshire, and in the south to those of Worcestershire and Herefordshire.

The social structure of the county was composed of various socio-economic groups. A large industrial area centred on Coalbrookdale and the East-Shropshire coalfield contained a dense population of immigrant families, rich entrepreneurs like the Darby and Wilkinson families, poor miners and iron workers from Wales. This was an area where both, the land-owning gentry, whose estates contained valuable mineral deposits such as ironstone, coal, clay and limestone, and the industrialists, who converted these raw materials into iron and pottery goods, could accrue large fortunes.

<sup>28</sup> D. Defoe, A Tour through the Whole Island of Great Britain (1724-6, 1986 edn.), pp. 397-398.



In contrast to this industrial heartland, there were the rural areas of Shropshire in which there were large gentry estates. The 1851 Census Abstracts record two-hundred and forty-five landed proprietors living in the county.<sup>29</sup>

Cassey's Shropshire Directory (1871) lists one hundred and seventy six 'Principle Residences of the Nobility and Gentry of the County of Shropshire.'<sup>30</sup> The occupants of these houses and those they employed, created a demand for goods and services which had an affect upon the trading communities of nearby towns. Thompson commented upon the likely effect of gentry houses on the economy of the surrounding area:

'The landed interest in this sense, at least until 1851, formed the largest group in society. Besides the landowners who formed the nobility and gentry of the country it comprised the great body of the agricultural community, the farmers and labourers who were producers, and the blacksmiths, wheelwrights and publicans who provided them with services. It provided direct employment for a high proportion of the large class of domestic servants and for a sizeable body of estate workers of varied skills and trades. But it also provided the chief means of livelihood for most professional men and retail traders of the country towns.'<sup>31</sup>

Another facet of the aristocratic and gentry families was their support for, or resistance to, any changes in transport systems. As will be discussed in chapters three and six, men like the Dukes of Bridgwater and Sutherland and the Leveson-Gowers who had extensive estates in the county were very active in promoting industrial enterprises and new

<sup>29</sup> E. Cassey & Co., History, Gazetteer & Directory of Shropshire (1871), pp. 17-19.

<sup>30</sup> Irish University Press, British Parliamentary Papers, 1851 Census, England and Wales, vol.1 (1970) p. 485.

<sup>31</sup> F.N.L. Thompson, English Landed Society in the Nineteenth Century (1963), p. 5.



transport systems. As will be demonstrated in chapter three the development of the Ellesmere Canal was largely through encouragement given by the Duke of Bridgwater and also Sir Richard Hill (a local resident and member of parliament) who gave his support to a petition in favour of the canal by the inhabitants of Whitchurch.<sup>32</sup> In the East-Shropshire coalfield in the eighteenth and nineteenth centuries the family of the Leveson-Gowers exploited the mineral deposits on the Sutherland estate. They built the Donnington Wood Canal (c. 1768) provided sophisticated lifting equipment at Hughes Bridge and later built a tramway (which later still became a railway), connected their mining and industrial enterprises to a canal wharf at Lubstree (SJ 693153).<sup>33</sup> However, as is discussed in chapter six, some landowners were very resistant to transport routes passing near their property. This is demonstrated in an enquiry into the building of the Oswestry to Whitchurch Railway and the apparent resistance of Lord Anson to the route of the Birmingham and Liverpool Junction canal.<sup>34</sup>

The social structure of the county of Shropshire was therefore varied. The landed gentry and owners of estates whose households could have some affect upon the economy of a market town, and who supported or resisted industrial and

32 Letter from Sir Richard Hill to Thomas Murrall Esq, dated 16 February 1793. Shropshire Records and Research Centre (SRRC), 6000/15014.

33 W. K. V. Gale and C. R. Nicholls, The Lilleshall Company Limited: a history 1764-1964 (1979), pp. 11 ff.

34 Minutes of the House of Lords Select Committee, Private Bill Evidence, Railways etc 1846-1899, part IV, SRRC microfilm no. 105 (1861) and L. T. C. Rolt, Thomas Telford (1958 repub. Penguin 1975) p. 190.



commercial enterprises. Industrial entrepreneurs who gave employment to thousands of artisans and craftsman in mining, metal-working, ceramics, paper-making and many other craft industries. The farmers and agricultural workers and the poor. These made up the social structure of the rural and urban communities which were served by the traders in towns and craftsman in rural villages and these in turn relied upon the transport systems to obtain and deliver their products.

The sources utilized and methods adopted in this thesis.

This thesis is primarily about the development of transport networks, the connections which were established between specialized areas of trade or manufacture, and the supply, demand and distribution of goods. One source which gives considerable information on these subjects is the Trade Directory. This source has been available in growing numbers from the seventeenth century and in one sense the Carrier's Cosmography (1637) is an early form of a trade directory that was specific to transport. However, from that period onward details of transport systems were combined with those of trade and commerce; firstly in London, then for some provincial towns, and eventually directories were published on a county-wide basis. Initially, the latter only gave details of selected market towns, but from the mid-nineteenth century information is often available on individual parishes.

An example of a nineteenth-century county-wide directory was Bagshaw's Directory of Shropshire (1851).<sup>35</sup> It contained

<sup>35</sup> Samuel Bagshaw, History Gazetteer & Director of Shropshire; comprising a General Survey of the County, with a variety of Historical, Statistical, Topographical, Commercial, and Agricultural Information. (1851).



715 pages of detailed information relating to every town, village and township in Shropshire on a parish by parish basis. It included some details of historic events that had occurred in the parish, its current acreage and population, its churches and schools, charities, postal services, courts, the market and listed of names of the gentry and those in trade. It also gave indications of which transport systems served the parish. For example the entry for the small township of Yorton, in the parish of Broughton after listing the vicar, a shopkeeper and four farmers, for transport it lists only:

Carrier Thomas Gregory carrier to Shrewsbury on Wednesday and Saturday.

A much more extensive list of transport systems was recorded for the town of Ellesmere it showed:

Omnibuses To Wrexham & Chester from the Red Lion Inn, at 7 o'clock in the morning, returning at 8 in the evening.  
To Ruabon, from the White Lion Inn, at half-past 6 in the morning, returning at 7 o'clock in the evening.  
To Whittington Station, from the White Lion Inn, at 8 o'clock in the morning and 6 in the evening.

Carriers Shropshire Union Railway and Canal Company, general carriers to all parts of the kingdom; Charles Pearce, agent, canal wharf.

Bagshaw's Directory of Shropshire gives a considerable amount of information which is useful to the local historian, however, a survey of the available directories for the 'Shropshire area' indicated that whilst many did contain valuable data, a number of problems could arise when using



them as a source. For example:

- 1) Trade Directories varied in number and quality at different periods.
- 2) The information about particular road-carriers, such as their destination and routes listed in one town, may not show a reciprocal route in another.
- 3) The recording of data appeared to increase through time, and in later periods more detailed information about local services between towns and their immediate hinterland was recorded.
- 4) In the earliest directories the term carrier may have been used to describe a pack-horse train rather than a waggon.
- 5) The information on canal and railway services was generally not as detailed as that for road-carriers.

Such problems question the use of the Trade Directory as a primary source, and where possible, some cross checks have been made between the trade directory and other sources. As will be seen in Appendix 1, a critique of the source has been made. While the analysis in the earlier periods must be covered with the caveat, that the results are only as good as the original source material, it will be noted that by the late eighteenth and nineteenth centuries using an extensive computer database allowed cross checks to be made between various directory entries. As will be seen in chapter two there is an on-going discussion on the quality of the evidence that can be culled from trade directories.

Overall, transport data was extracted from ninety-eight different trade directories spanning the period 1637 to 1877 and other source material such as port books, lists of details on railways, canals, traders in towns, etc etc. Overall in excess of 17,000 entries were extracted and listed and to handle this vast amount of information various computer



databases and spreadsheets were created.<sup>36</sup> In some cases up to thirty fields of data were required to record and sort the data in a logical way. For example, the data on road-carriers extracted from trade directories, included fields on: the carrier's name, the name of the town, their starting point within it, destination, route, days and times of travel. To these additional fields were added for Personal Identification Numbers (PIN's) and various sort codes. The PIN's enabled carriers to be identified from one period to another which was especially important where names were changed by the creation of partnerships or companies. The sort-codes were used to assist in the overall analysis, for example, as will be discussed in chapter five, the starting points in a town were coded for inns, warehouses, wharfs, street names or a carrier's 'own house'.

Details of some of the databases will form part of the on-going discussion and it will be shown in the text that the cross-checking facility provided by the computer enhanced the quality of the original data. For example, it allowed a carrier's route to be plotted with some accuracy, even if a trade directory entry for a particular town did not record his name. Therefore a high degree of confidence could be expressed in the results.

<sup>36</sup> The computer used was a Research Machines Nimbus PC-396/25 and the software was dBASE IV 1.5 and Lotus 123. The thesis was typed using the Volkswriter de-luxe word processing package.



## CHAPTER 2.

### THE DEVELOPMENT OF ROAD-TRANSPORT NETWORKS

In this chapter the development of the road-transport network in the Shropshire area will be examined, and particular attention will be paid to those records which cast light upon the magnitude of these systems.

From the seventeenth-century navigable rivers and roads provided routes which made up the transport network. Through time, developing technologies overcame the barriers of distance and physical terrain, and new networks evolved which supplemented or replaced the earlier pattern. As Gerhold said:

'The perspective of the historian concerned with the function of transport in the economy ought not to be of transport as a service to be provided but instead of distance as an obstacle to be overcome; in other words, rather than making comparisons between different forms of transport (and inevitably comparing road carriers unfavorably with railways), transport services should be assessed in terms of the degree to which they overcome the difficulties which distance posed to manufacturers and others.'<sup>1</sup>

However as recently as 1959 Savage wrote of road-transport:

'The appalling state of the roads in the seventeenth and eighteenth centuries is evident from most contemporary accounts. For much of the year, the soft dirt or gravel roads remained impassable. They were often so narrow that two pack-horses could only pass with difficulty, and in winter became so flooded that they were turned into permanent bogs, strewn with big boulders. Only the most adventurous travelled and there were many parts of the country which travellers never visited and whose inhabitants knew little beyond their own narrow districts.'<sup>2</sup>

The writings of Savage, in the mould of a traditional view of road transport, suggested that many parts of the country, including small towns, must have existed in total isolation

<sup>1</sup> D. Gerhold, Road Transport before the Railways (1993), p. 222.

<sup>2</sup> C. Savage, An Economic History of Transport (1959), p. 13.



from a wider network of trade. Such views have now been challenged by a number of scholars, and this thesis adds further evidence, drawn from another part of the country, to support the argument that road transport has been an important factor in the economic life of England since at least the seventeenth-century.<sup>3</sup>

The traditional view of poor, or non-existent road transport also affected writers who sought to establish an 'industrial revolution'. They have had a tendency to concentrate upon the role of the canal or the railway as the only viable means of transport between areas of raw material production and areas of manufacture. Undoubtably, these transport systems did fulfil such a role, but few writers saw the growth of these systems as an adjunct to an existing road network which served market towns. However, Denholm writes:

'Whilst much has been written about the impact of the canals upon the industrial development of England in the late eighteenth and early nineteenth centuries, especially in connection with the opening up of the mineral resources of the Midlands, little attention has been paid to the influence canals had on the traditional market towns of the region.'<sup>4</sup>

It does appear that it was the gloomy writings of certain diarists and travellers, and their comments on bad roads, that has caused many historians to take the view that road

<sup>3</sup> Hey examined north-Derbyshire and south-Yorkshire, Turnbull studied Pickford's routes from Manchester to London, Gerhold explored routes from Exeter and the west-country to London and Chartres the routes radiating from London. D. Hey, Packman, Carriers and Packhorse Roads (1980); G. L. Turnbull, Traffic and Transport: An economic history of Pickford's (1979); Gerhold, Road Transport; D. Gerhold, 'The growth of the London carrying trade, 1681-1838', Economic History Review, 2nd series, XLI, 3, (1988); J.A. Chartres, 'Road carrying in England in the seventeenth century: myth and reality', Economic History Review, 2nd series, vol. XXX, (1977).

<sup>4</sup> A.F. Denholm, 'The impact of the canal system on three Staffordshire market towns 1760-1850,' Midland History, vol. XIII (1988), p. 73.



transport was virtually non-existent before the nineteenth century. However, at least one seventeenth century observer, G.M., indicated that road transport was exceptionally good. He said:

'Besides the Conveniency of Travelling by Water, either by Sea, or here and there upon Rivers, I may say the English Nation is the best provided of any for Land-Travel, as to Horses and Coaches. And the Truth is, there is not perhaps a Country so proper for't, tis generally so open and level.'

'Travelling on Horseback is so common a Thing in England, that the meanest sort of People use it as well as the rest. Which sometimes fills the Roads with Riders, not without Frays now and then, about giving the way. And as English Horses are the best for Expedition, so 'tis rare upon the Road to see an Englishman but upon a gallop. But for Persons that are tender, or disabled England excels all other Nations in the Conveniency of Stage-Coaches, going at certain times to all parts of England, at least to the most noted places: And that with so much speed, that some will reach 50 miles in a Summer Day; and at so easy Rates, that it is in some Places less than a shilling for every Five Miles.'<sup>5</sup>

This extract indicates that regular passenger-coach services existed across much of the country, and to passenger services must be added the extensive carrier services which frequently carried passengers as well as goods, some of which were referred to as Coach-waggons. While writers of the past have tended to concentrate on the exotic aspects of coaching, in recent years a number of historians have demonstrated that regular carrier services were in existence from the sixteenth century and probably earlier. An interest in the carrier services was pioneered in the 1970's by Professor Everitt at Leicester University.<sup>6</sup> Chartres writing about the period

<sup>5</sup> G.M. The New State of England under their Majesties  
K. William and Q. Mary (1693), part 2, p. 40.

<sup>6</sup> A. Everitt, 'Town and country in Victorian Leicestershire: the role of the village carrier,' in A. Everitt, ed, Perspectives in English Urban History (1973); A. Everitt, 'Urban growth and inland trade', The Local Historian, vol 8, (1969), p. 6.



1500-1750 suggests that a connection existed between the development of road-transport routes and the economy of market towns. Of Warwickshire and Norfolk, he comments:

'The tentative conclusion for this single county (Warwickshire) is that the ease of transport and communication determined the success or failure of market centres... The evidence from widely differing counties confirms that communication advantages, outlined in Warwickshire and Norfolk above, were basic determinants of the success or failure of market centres.'<sup>7</sup>

Hey made a link between transport systems, the growth of the economy, and the population from the sixteenth century when he says: 'In order both to feed and to employ all these extra people the national economy underwent fundamental changes and the two centuries that follow the accession of Elizabeth saw substantial increases in production and trade... The role of the transport sector of the economy was obviously vital to this success.'<sup>8</sup>

In his book on Staffordshire, Palliser argues that not only was a goods transport system essential for the internal growth of a town's economy, but also that towns situated on long distance carrier and coach routes expanded as a result of the through traffic. He adds: 'Carriers' waggons from the north-west were already passing through Newcastle, Stone and Lichfield in 1564, and in the coaching age of the eighteenth century all these towns prospered greatly.'<sup>9</sup>

As more research is undertaken into the surviving records of particular carriers, such as that by Turnbull into Pickford's of Manchester, and Gerhold into Russell's of

<sup>7</sup> J. Chartres, ed., Agricultural Markets and Trade, 1500-1750 (1990), pp. 162-163.

<sup>8</sup> Hey, Packman, Carriers, p. 225.

<sup>9</sup> D.M. Palliser, The Staffordshire Landscape (1976), p. 157.



Exeter, so a better understanding of the sophisticated nature of road transport in the eighteenth century is emerging. However, few carrier's records have survived and no similar records have been discovered for carrying-companies in the Shropshire area. Therefore, in this thesis, the works of Turnbull and Gerhold have to be used as models of the internal workings of the carrier trade.

Scholars who have studied road-carriers, have tended to take two approaches to the subject; a linear perspective, that is studying the main directional route followed by a particular carrier (Turnbull and Gerhold); or a central place perspective, studying the convergence of carrier routes upon a particular town at a particular point in time (Everitt and Chartres). In one article Turnbull has considered the cross-country routes taken by Provincial Carriers, and Freeman considered the routes for an entire county.<sup>10</sup> In this thesis the perspective taken is that transport systems formed a series of integrated networks.

#### The scale of road-carrier routes.

Previous researchers into road-carriers have tended to divide them into three different levels of activity: London Carriers; Provincial Carriers; and Local Carriers. Because in this thesis road-carriers are seen as part of a wider developing network of waterways and railways the traditional terms used to describe road-carriers have been abandoned. A new system of categorisation has been created which will allow

<sup>10</sup> G.L. Turnbull, 'Provincial road carrying in England in the eighteenth century', The Journal of Transport History, New Series, vol. IV (1977-8); M. J. Freeman, 'The carrier system of south Hampshire, 1775-1851', The Journal of Transport History, New Series, vol. IV, No. 2 (1977), pp. 61-85.



a comparative statistical analysis of transport and trading functions (see chapter seven below). Road-carriers have therefore been scaled into three categories: 'national'; 'middling'; and 'local'. The scaling is based upon the following criteria:

1) 'national' carriers: those whose routes link London and the Provinces and those that cover long distance cross-country routes for example from Bristol to York etc. Within this category are carriers such as John Jolly whose carrying warehouses were established in Ludlow, Birmingham and Worcester and from which his routes extended south-east to Oxford and London, north-west to Chester and Manchester and westwards into Mid-Wales as far as Aberystwyth.

2) 'middling' carriers: those whose routes link together adjacent small market towns or surrounding market towns to an entrepot such as Birmingham. Within this category are carriers such as John Cotterill whose routes connected Birmingham with the market towns of Wolverhampton and Brewood and with the industrial village of Bilston in the 'Black Country'.

3) 'local' carriers: those whose routes link the settlements of a rural hinterland to a market town. This category covers what was often termed the 'Village Carrier' a man or woman who owned a small cart rather than a waggon and who provided a once or twice weekly service between a market town and the villages in its hinterland. Such a carrier is the subject of Blackmore's book entitled "Cripps the Carrier" and Mr. Barkis in Dickens' David Copperfield.<sup>11</sup>

### The development of Shropshire's road-transport networks.

Before the seventeenth century, when trade directories first appear, the evidence for road-transport networks is scant, and there are no directories specific to Shropshire before the last decade of the eighteenth-century. Some clues to Shropshire's early road-transport systems, but not necessarily to networks, can be gleaned from toll charges, probate inventories, records of badger's licences, and quarter session reports. To these can be added details of carrying routes gleaned from non-Shropshire directories of the

<sup>11</sup> R. D. Blackmore, Cripps the Carrier (n.d. c.1890); C. Dickens, David Copperfield (1867-8, c1930's edn.) p. 59 ff.



seventeenth and eighteenth centuries, in particular those of Birmingham, Manchester, Liverpool, Chester and London which list some connections with Shropshire.

From the middle ages Shropshire, and its adjacent Welsh region, were important wool and cloth-producing areas. There can be little doubt that this trade was serviced by the waterway route down the River Severn, and by pack-horses carrying goods to London, to east-coast ports such as Boston, and to the river ports on the Severn and the Trent. From this period tolls were charged for maintenance of certain bridges, long before the development of the toll road and the turnpike system. It is suggested by Martin that a study of toll listings could give vital clues to intensity of trade.<sup>12</sup> Although not a perfect record of what actually passed through a particular toll, the type of toll charges do give some indication of the range of goods which were being transported in the medieval period. Six charters were issued between the years 1285 and 1412, granting the right of tolls for the maintenance of Montford Bridge, 4 miles (6.4 Km.) north-west of Shrewsbury on the main route to north-Wales.<sup>13</sup> Of these

<sup>12</sup> G. H. Martin, 'Road travel in the middle ages, 1314-1470', The Journal of Transport History, New Series, vol. III, (1975-6).

<sup>13</sup> Oswestry and Shrewsbury were important wool markets and vied with each other for the staple according to T. C. Mendenhall, The Shrewsbury Drapers and the Welsh Wool Trade in the XVI and XVII Centuries (1953), pp 28-37. Bagshaw records: 'For upwards of two hundred years the Welsh webs were brought to Oswestry, as the common market, and there were bought by the Shrewsbury drapers... In 1621 it was agreed by the drapers to buy no more cloths in Oswestry. The recorder of Oswestry of the market of Welsh cottons. A thousand pounds in ready money was left in the town every week, sometimes more; but now, since the staple of cloth moved to Shrewsbury, the town is much decayed".' S. Bagshaw, History, Gazetteer and Directory of Shropshire (1851), p. 166.



charters those for 1285 and 1412, were transcribed by Drinkwater in 1907.<sup>14</sup> Apart from giving clues to the normal transport of agricultural goods: cattle; sheep; corn and wool, the 1285 list includes salt, fish, casks of honey, ells of linen or canvas, trusses or packs of cloth, lead, iron and a particular mention of carts carrying timber boards or firewood for sale and 'of every cart or pair of wheels for sale crossing there one farthing' This charter also indicates what river traffic passed beneath the bridge: 'For every float (or raft) of firewood or timber descending with force against the piers of the said bridge to the injury of the same reasonable compensation shall be exacted on the view of true and lawful men.' The list in the 1412 charter was more extensive.<sup>15</sup>

These lists demonstrate that in medieval Shropshire there was trade in a wide range of goods from distant sources and transport by vehicles such as waines, the precursor of the waggon, and 'pairs of wheels' which normally related to carts. The 1412 list mentions iron plates for wheels which were a feature of medieval waggon construction. It is clear therefore that in the middle ages wheeled road transport was crossing Montford Bridge and timber floated down the River Severn.

<sup>14</sup> C.H. Drinkwater, 'Montford bridge, tolls, customs etc, AD 1286 to AD 1412' T.S.A.S. 3rd series, vol VII, (1907).

<sup>15</sup> In addition to the items found in the 1285 list the 1412 list included: tuns, pipes and roundels of wine and ale, wain-loads of firewood, timber, boards, lathes, tiles and hay, bundles or bales of merchandise of the value of 20 shillings or upwards, hides either fresh, salted or tanned, horse-loads of sea fish, wrought iron, sea coles, charcoal, garlic or onions, tallow, lard, butter and cheese, oil, herrings and red herrings. From the other charters the writer also lists, salt cod from Aberdeen and dried or smoked fish, eels, millstones, steel, lead, alum, potash, copperas, verdigris, nails of various types, iron plates for large wheels, brass, Welsh and Irish cloth, silk, Spanish and locally produced leather, oak bark, woad, malt, furs and turves.



From the seventeenth century, probate inventories also give clues about the road carrying trade as well as the stocks of imported goods which were appraised in traders premises. In Shropshire considerable research has been undertaken into probate inventories, some of which have been published. Dr. Watts supplied the following data extracted from probate inventories used in her thesis.<sup>16</sup>

In 1605 Homfrey Kemerley of Wellington is described in his inventory as a carrier and it is clear that the term included those who operated pack-horses. His goods total £4-05-11. It is clear from his equipment 'an olde packesaddle, and an olde packesaddle-tree' valued at 6d that he was a packman. Other items listed tell us of the type of goods he carried, for the list includes 'fowre olde lyme bagges, one bagge for malte and another for meale'. In 1621 Nicholas Platte was also described as a carrier, and had goods totalling £4-16-06, but there was no mention of any carrying equipment. In 1630 William Tallbott of Whitchurch, whose Probate Inventory lists only household goods was recorded in other sources as a Chapman. The inventory of Thomas Davies, a baker of Ludlow, dated 8th August 1645 and valued at £23-08-04, included four pack-saddles and other horse gear valued at 6s-08p (Plate 2.1).

Trinder and Cox in Yeoman & Colliers (1980) list ten inventories for carriers. One was for William Smith of Watling Street, Wellington appraised in 1660. The total value of his goods and chattels was £63-00-08 which included a waine and a tumbrill with iron bound wheels which together with a

<sup>16</sup> Dr. S. Watts, kindly supplied data on some of the probates she used in her unpublished PhD: 'The small market town in the large multi-township parish: Shifnal, Wellington, Wem and Whitchurch circa 1535-1660.' Wolverhampton University. (1995)



PROBATE INVENTORY OF THOMAS DAVIES, BAKER OF LUDLOW

6 Aug 1643 showing Four Pack Saddles and other horse gear worth six shillings and eight pence.

Inventory Indented of all  
the goods Sattels and Chattells  
movable and immovable whatsoever of Thomas  
Davies late of Ludlow in the County of  
Salop Baker deceased had made and taken  
the fifth day of August Anno Dom 1643 by  
Richard Gough, Anthony Brown & Thomas  
Bryll appraisers thereof.

Imprimis some laboring horses	5 <sup>th</sup> s <sup>ts</sup>
Item one feather bed	10 <sup>th</sup> s <sup>ts</sup>
Item one green rug	10 <sup>th</sup> s <sup>ts</sup> 10 <sup>th</sup> p <sup>ts</sup>
Item two Blanketts one other blanket	10 <sup>th</sup> s <sup>ts</sup>
Item some text in number two	10 <sup>th</sup> s <sup>ts</sup>
Item a small quantity of dry	10 <sup>th</sup> s <sup>ts</sup>
Item some pack saddles and other horse gear	10 <sup>th</sup> s <sup>ts</sup> 10 <sup>th</sup> p <sup>ts</sup>
Item some silver spoons panned to the use for	10 <sup>th</sup> s <sup>ts</sup>
Item the silver wearing apparel	10 <sup>th</sup> s <sup>ts</sup>
Item in ready money	10 <sup>th</sup> s <sup>ts</sup>

23 - 8 - 4



few items of farming equipment was valued at £4-00-00. Other carrying equipment in various rooms included:

'3 packsaddles, 2 hackney saddles, 2 waine ropes, 6 maling cords, 4 mountin boards, 1 chest of horsegears, 15 colts three years old' and 'Nine Naggs and Mares wth packsaddles packcloathes girths wontyes and cords" valued at £27-00-00' .

This book covers the area of the east-Shropshire coalfield and others entries refer to persons in the carrying trade, who appear to have other occupations, such as small farmers or innkeepers.<sup>17</sup>

Although it is not possible to assess the routes followed by the horses and carts mentioned in these inventories, they do demonstrate that for some individuals the carrying trade was their main occupation. Some innkeepers listed had virtually no indication of horse provision, but William Barker of Wellington, appears to have combined an extensive transport service with his inn-keeping business. Joshua Dunton a tanner, used horses and equipment as a 'badger', as well as for his own business (see page 48 below). However, Thomas Davies mentioned above, may have only used his pack-horses for carrying flour for his own baking business in Ludlow.

A study of the items listed in probate inventories of shopkeepers, can also demonstrate how imported commodities were available in quite small towns. Two examples from Shifnal indicate a considerable range of goods held. In 1713

<sup>17</sup> Others listed included: William Barker, an Inn-holder of Wellington, whose total goods in 1752 were valued at £74-18-05, of which the largest sum listed, namely £38, was for '14 horses with geeres'. On a smaller scale, when Allen Pickering of Pains Lane, Wrockwardine Wood died in 1714/15, his inventory valued at £19-10-00 included £13 for six horses and mares and £5 for 'The Wagon and all the Traces and one great Chaine and all materials belonging to the Wagon and horses.' B. S. Trinder and J. Cox, Yeoman & Colliers in Telford, (1980) pp. 161 ff.



the inventory of John Green, a grocer, totalled, £69-16-10. In his shop were listed seventy-five items some of which were clearly not produced in the immediate area. These included 'ffive hundred and three quarter of leafe tobacco' valued at £21-09-04, soap, mohair, Jamaica pepper, sugar, molasses, currants, raisens, ground ginger, coriander, aniseed, clove water, carraway seeds and brimstone.

The inventory of Mr. George Austin, a Shifnal mercer who died in 1710, had a total value of £423-05-08. It listed one hundred and thirty eight items in his shop having a value of £365-01-02, these included many different types of cloth such as bays, serges, worsteds, stuff, linen, callico, crape, shrouding, flannel, fustian, satin, silk and '3 pes of Stripe Scotch Cloath' valued at £2. He also had in stock a number of religious books including, bibles, prayer books, psalters and catechisms valued at £3 and sugar and tobacco valued at £9.<sup>18</sup>

Inventories such as these indicate that small-town shopkeepers had access to country-wide supplies, and also to goods imported from abroad. It is clear therefore, that a sophisticated distribution system was in existence from at least the seventeenth century and, when taken with the evidence from the Montford Bridge tolls, suggests that such a service had existed from the middle ages.

#### Local carrying services in seventeenth-century Shropshire.

Further insights into Shropshire's local transport services can be gleaned from a listing of 'Badgers, Drovers

<sup>18</sup> B. Trinder, Shropshire Community Education Service: Classes in Local History, Transcription copies (1982/3).



and Ale sellers licences, 1613-1714' and from entries in printed quarter session order books.<sup>19</sup> In the eighteenth century, except on rare occasions, references to badgers disappear from the quarter session records. A badger was a licensed carrier and trader controlled by legislation contained in 5 Eliz. c.12. (1562/3) and which continued in force until 1772.

A guide for Justices of the Peace dated 1729 states that badgers were licensed as:

Transporters,	)	(	Butter	
Buyers,	)	(	Cheese	
Carriers,	)	either of	(	Corn
Laders,	)	(	or	
Kidders,	)	(	Grain. <sup>20</sup>	

To be granted an annual licence, the badger had to be a married man; a householder; and of thirty years of age. Licences were also granted to higlers who were limited to carrying and to buying and selling 'Hens, Chickens, Capons, Eggs and any other dead victuals'. For both badgers and higlers the licence gave them the right to sell at any market.<sup>21</sup>

Apart from stray entries in the Shropshire Quarter Session Order Books, it was the 1613-1714 list that gave the most

<sup>19</sup> Manuscript list, Shropshire Records and Research Centre (SRRC) QE/2/2/1; Sir O. Wakeman and R. L. Kenyon, eds, Abstracts of the Orders of the Shropshire Quarter Sessions 1638-1839, 4 volumes (circa. 1902).

<sup>20</sup> W. Nelson, The Office and Authority of a Justice of the Peace, 10th edn. (1729) p. 61; Hey, Packman, Carriers, p. 178.

<sup>21</sup> A case quoted in Sussex demonstrates the extent of a licence for a badger of corn: 'R. is licensed and appointed by the Justices in their said Sessions to be a Common Badger, Lader, Kidder, Carrier, or Buyer of Corn or grain, or Meal, and to carry it to the City of London, or the Suburbs thereto, or to any other Fair or market...'. Nelson, The Office and Authority, p. 62.



comprehensive information on the licensing of badgers. In the period 1651-61 (corrected to historical years) 357 licences were granted to 216 individual persons. The list in all cases showed the name of the badger, and for many entries the place from which they operated. A database was created from the list, and an analysis undertaken of all the names and places mentioned. It was possible to identify the parish of 197 of the 216 named badgers.<sup>22</sup>

Hey says, of the licensing of badgers and swailers: 'We do not know how widely this licensing system was evaded, but a great number of regular dealers certainly took the precaution of observing the law.'<sup>23</sup> The licence was granted for a year, and it will be noted from Table 2.1, that the granting of licences, when listed by historical years, shows a somewhat uneven pattern, with a range that spans from six licences in 1660 to seventy-nine licences in 1657. Ignoring the year 1651, because the list starts with the Easter session the mean of the remaining ten years is 33.7 and the median 25.5. Although the sample is too small to make extensive claims, it would appear that the low number of licences (10) issued in 1655 may well represent the challenge which was being made to the Commonwealth Parliament which resulted in the period known as 'The Rule of the Major Generals'. Further the low number of licences (6) in 1660 may well be related to the collapse of the Commonwealth, and the changes in government structure when the monarchy was reinstated.

<sup>22</sup> Some places were townships which could not always be identified owing to confused spellings, or had names such as Eyton, or Walton which occurred in more than one parish. For some entries an unidentifiable parish was solved by searching for the Badger's names in the International Genealogical Index, and indexes of Shropshire printed parish registers.

<sup>23</sup> Hey, Packman, Carriers, p. 179.



Table 2.1

SHROPSHIRE BADGERS AND DROVERS LICENCES 1651-1661  
(Corrected to historical years)

ex Shropshire Quarter Session Records OS 254.

Year	Number of licences issued per session				Annual Total
	Epiphany	Easter	Trinity	Michaelmas	
1651	--	10	--	10	20
1652	12	4	--	23	39
1653	21	11	2	12	46
1654	14	3	11	--	28
1655	3	1	--	6	10
1656	17	13	3	23	56
1657	56	7	2	14	79
1658	23	--	--	--	23
1659	8	1	2	3	14
1660	6	--	--	--	6
1661	36	--	--	--	36

Total licences issued 357 representing 216 individual persons of who 197 can be identified to specific parishes.



Names from the badger's database were cross-checked to the available probate inventories noted above. Joshua Dunton, who died in 1680, appears to have been granted a badgers licence in the Michaelmas session of 1653. His inventory indicates that he was a tanner, and among his extensive stock valued at £357-10-06, there was mention of 'Two paire of iron bound wheels, one carte body, two tumbrill bodyes and other implements of husbandry £8-00-00, also two mares one colt nag £4-00-00'.<sup>24</sup> If he is the same person this suggests that badging, or carrying, was only part of a much more extensive tanning business.<sup>25</sup>

The Shropshire badgers were licensed to trade in any market town and their distribution has been mapped (Figure 2.1). This shows that 80 (43%) lived in the market-town parishes of Shifnal (24), Cleobury (19), Whitchurch (17), Drayton (11), Wellington (9), and Newport (6), all towns situated in the eastern part of the county. This was an area where the soils were suitable for arable production and suggests that much of the trade was in corn. Those listed as maltsters (see note 25) were also situated in this area. Other market towns listed were Stretton (7), Ellesmere (4), Shrewsbury (3), Wem (3), Oswestry (2) and Clun (1). No badger's licences were granted for the towns of Bishop's

<sup>24</sup> Trinder & Cox, Yeoman and Colliers, pp. 263-5.

<sup>25</sup> The badgers list also indicates that ten licence holders were connected to the malting trade, these were William Dickin the younger of Hodnet (1653-58), Alan Filldow of Wellington (1652-53), John Greene of Whitchurch (1651-58), John Hill of Wellington (1651-57), Thomas Lloyd of Rodington (1651-52), Mary Maddox of Eaton Constantine (1651-60), Richard Manning of Whitchurch (1652-53) whose business may have been continued by his wife, for a Ruth Manning is licensed as a Badger from 1555-60, James Nevitt of Cleobury (1653), Lawrence Norcroppe of Drayton (1656-7), and George Palmer of Cleobury (1653).

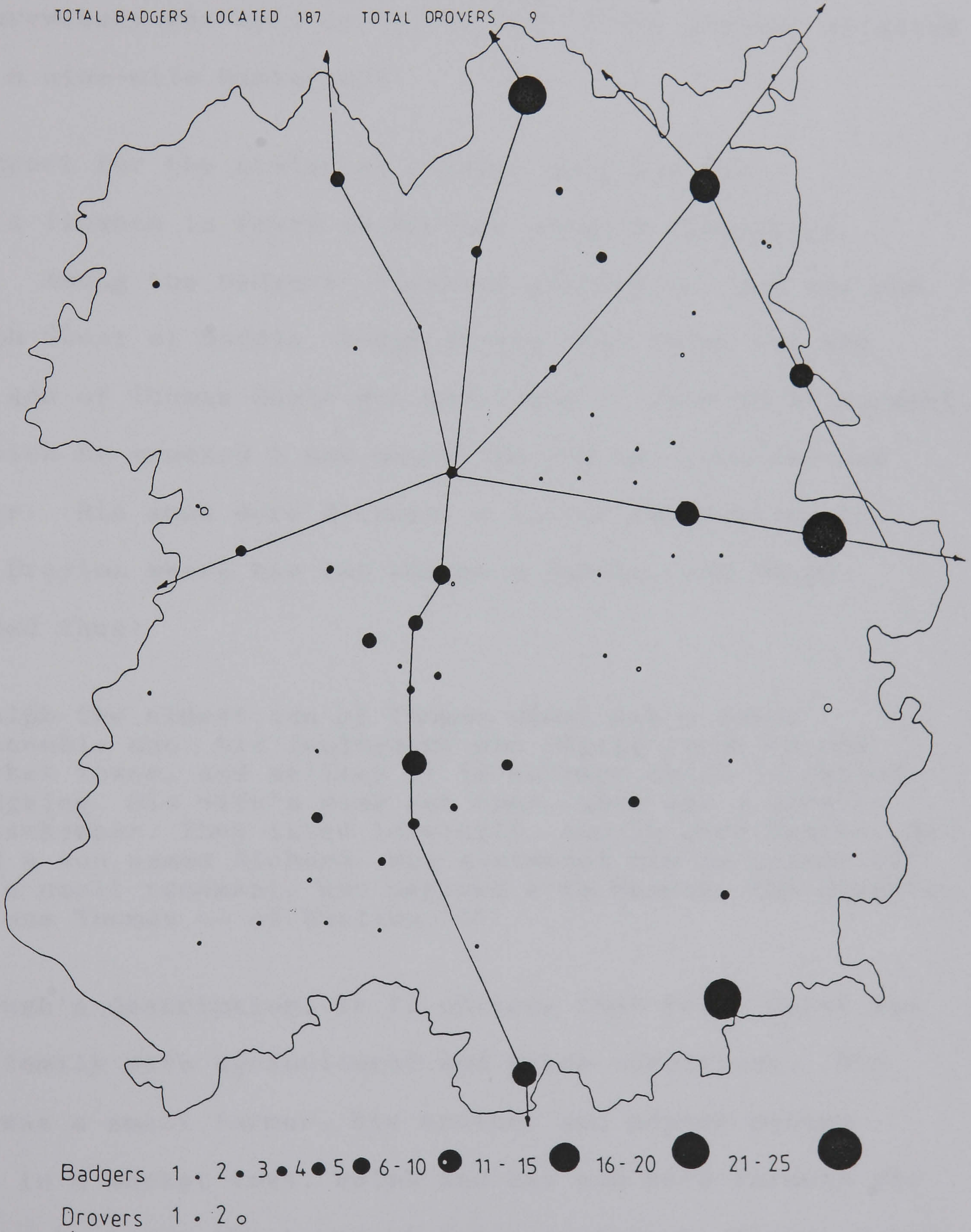


Figure 2.1

BADGERS AND DROVERS LICENCED 1651-1659

ex Shropshire Quarter Session Records (ref QS 254)

TOTAL BADGERS LOCATED 187    TOTAL DROVERS 9



TGH 1993



Castle, Bridgnorth, Broseley, Ludlow or Wenlock although the latter does have a drover licenced. Some towns appear to have been served by badgers in their immediate hinterland. For example seven badgers were licensed in Ashford Carbonell just 2.5 miles (4.0 Km.) south of Ludlow, but in Shrewsbury only two licensed badgers were featured in the list. It is probable that Shrewsbury was well served by the thirty badgers situated within a nine-mile hinterland.

Support for the status of persons applying for a badger's licence is found in Richard Gough's History of Myddle. Among the badgers' licences granted in 1660 was one to Ralph Guest of Myddle. Gough states that Ralph was the eldest son of Thomas Guest who had taken a lease on a tenement upon which he erected a new house. He had two sons and one daughter. His sons were Richard, a tailor who settled in Market Drayton where his son became a barber, and Ralph described thus:

'Ralph the eldest son of Thomas Guest was a sober peaceable man; his imployment was buying corne in one market towne, and selling it in another which is called Badgeing. His wife's name was Anne, shee was a decent housekeeper. They lived loveingly, and in good repute. He had a son named Richard, who succeeded him as tenant of this small tenement, who marryed with Hannah, the daughter of one Thomas -- of Burlton.'<sup>26</sup>

From Gough's description, it is obvious that Ralph Guest was from a family with agricultural and trade connexions. His father was a small farmer, his brother and nephew became traders in a market town. Ralph and his son were farmers who continued to lease the tenement taken earlier by Thomas Guest.

<sup>26</sup> R. Gough, The History of Myddle (1834, 1988 edn.) pp. 182-3.



Gough also made an oblique comment on road carrying to London when he refers to a John Foden, a Cheshire man, who 'came to live in Mr Lyster's cheife farm in Broughton, where they kept a good stock of cows and a good teame of horses with which he carryed goods to London.'<sup>27</sup>

Transport of cattle by droving, and Shropshire cattle fairs.

The list of licences issued between 1651 and 1661 recorded eleven men who were granted drover's licences. The movement of cattle to fairs and markets by droving was part of the agricultural economy of Shropshire from the sixteenth-century. The weekly markets and numbers of fairs in many Shropshire towns were the focal points for such trade. Richard Gough who lived at Myddle, between Shrewsbury and Oswestry, comments upon both towns: 'But the greatest convenience is the benefit of good marketts, as 1st Shrewsbury, the County town where there is a market on every Wednesday and Saturday for corne; on every Saturday for cattell besides six faires.'<sup>28</sup> Of Oswestry he says: 'On the 4th March is a good fair there for great oxen; on the 1st of May for cowes and calves, and at St Andrew's tide for fatt swine.'<sup>29</sup>

<sup>27</sup> Gough, The History, p. 247.

<sup>28</sup> Gough explains how the Shrewsbury fairs specialized in certain types of cattle: 'the 1st on Wednesday after the cloase of Easter... cows and calves, for old oxen and barren beasts; the 2nd on Wednesday in the weeke before Whitsuntide... the same purposes; the 3rd att Midsummer, wool, fresh oxen for the teame and barren beasts; the 4th on Lambmas day... sheep, wool, and cattell; the 5th on St Matthew's day, Sep. 21st. a great fair for white meat and for young heifers; The last is called St Andrew's faire... for white meats, fatt swine, and fat beasts.' Gough, The History, p. 266.

<sup>29</sup> Gough, The History, p. 271.



Edwards, from his study of Shropshire market toll books, indicates that a number of families in the Myddle, Loppington, Wem and Ellesmere area specialized in droving, and says 'At least fifteen members of the Dickins family from the various townships of Ellesmere and Loppington were selling cattle at Shrewsbury between 1600 and 1655. The span of the toll books of the fair is sufficiently long to show the existence of dynasties of droving families, such as the Dickinses who continued in the same business for a number of generations.'<sup>30</sup> Although the name Dickins does not appear among the drovers licences of 1651-61 there were two who were licensed as badgers, Rowland and William Dickin of Wollerton, in the parish of Hodnet, who also appear to be men of substance.<sup>31</sup> What connection this family may have had with those living about ten miles to the west, and mentioned by Edwards, has not been pursued.

Apart from the importance of the Shrewsbury and Oswestry fairs and markets to Shropshire farmers, they were also the

<sup>30</sup> P. R. Edwards, 'The cattle trade of Shropshire in the late sixteenth and seventeenth centuries.' Midland History, vol. VI (1981), p. 75.

<sup>31</sup> The Dickin family of Hodnet were listed in the preface to the printed Hodnet parish register by Fletcher (1910). He stated that they were one of the more important families whose status was indicated as 'esq.', 'gent.', or 'Mr.'. The earlier volumes of the parish register (pre 1656) are lost but a list of wills has been included in the preface and this showed a William Dickin buried in 1658, this may have been the William Dickin who was granted a badger's licence from 1653-1658. Without parish register information a search of wills could help reconstruct this family, but this has not been attempted. Rowland Dicken who was granted a badger's licence in 1659 appears to have been buried in 1690. The baptism of his children were from 1661 -1680. W. G. D. Fletcher, Shropshire Parish Registers; Diocese of Lichfield, vol. XI (1911).



focal points for cattle droving routes from North Wales. In the south of the county the fairs and markets of Bishop's Castle and Ludlow were also important places for selling cattle from mid-Wales. Edwards comments on how in 1609 the inhabitants of Bishop's Castle, made a case opposing a proposed new market at Church Stretton, he says:

'They extolled the virtues of the town. emphasizing its convenient position as a centre of trade with Wales with cattle coming across the border one way and consignments of corn moving the other... Men from the Bishop's Castle area also travelled deep into Wales to anticipate the droves coming out of that country.'<sup>32</sup>

Skeel, in her seminal study of the cattle trade of Wales, stated that droving of Welsh cattle can be traced back into the middle ages.<sup>33</sup> She indicated that this trade was not confined to supplying the fattening fields around London, but that Welsh cattle were marketed in many different parts of Britain. However, the main trade that developed was to London and since Skeel's researches in 1926 there have been a number of studies of Welsh cattle-droving routes.<sup>34</sup> From various articles and books, it is possible to demonstrate how a network of droving routes developed across Shropshire,

<sup>32</sup> A road in Bishop's Castle is called Welsh Street and a field is called 'Welshman's leasow'. In Shropshire a leasow is a field used for pasture. Edwards drew upon Bishop's Castle records referred to in T.S.A.S. vol. X, (1887), he also quotes examples of buyers from the area who attended markets in Machynlleth in 1632, from E. Evans, 'Two Machynlleth toll books', National Library of Wales Journal. VI (1949-50). Edwards, 'The cattle trade of Shropshire', p. 73.

<sup>33</sup> C. Skeel, 'The cattle trade between Wales and England from the fifteenth to the nineteenth centuries', Transactions of the Royal Historical Society, 4th series, vol. IX (1926).

<sup>34</sup> R. Colyer, The Welsh Cattle Drovers (1976) ; K. J. Bonser The Drovers; who they were and how they went (1970); P. G. Hughes, Wales and the drovers (1943, 1988 edn.); S. P. Thomas, 'Twelve miles a day: some thoughts on the drovers', Radnorshire Society Transactions, vol. LIV (1984).



although when they evolved, and whether they changed through time is open to question (Figure 2.2).<sup>35</sup> The moving of cattle by droving was a transport system that was effective from the middle ages until the mid nineteenth-century, when it was finally superseded by the railway.

While it is possible to estimate the development of the droving network, it has not been possible to re-construct the carrier or badger routes of Shropshire in the seventeenth century. However some documents, like the list of creditors of Francis Charlton of Wellington in 1687/8, give an insight into local areas of trade. Charlton had developed the iron, coal and lime trades on his estate, and the list shows what accounts were outstanding and the location of his creditors (Figure 2.3). This shows that his trading area was principally within a ten-mile radius of Wellington and indicates that a local road-transport system existed to provide supplies to this area as there were no navigable rivers in this particular area.<sup>36</sup>

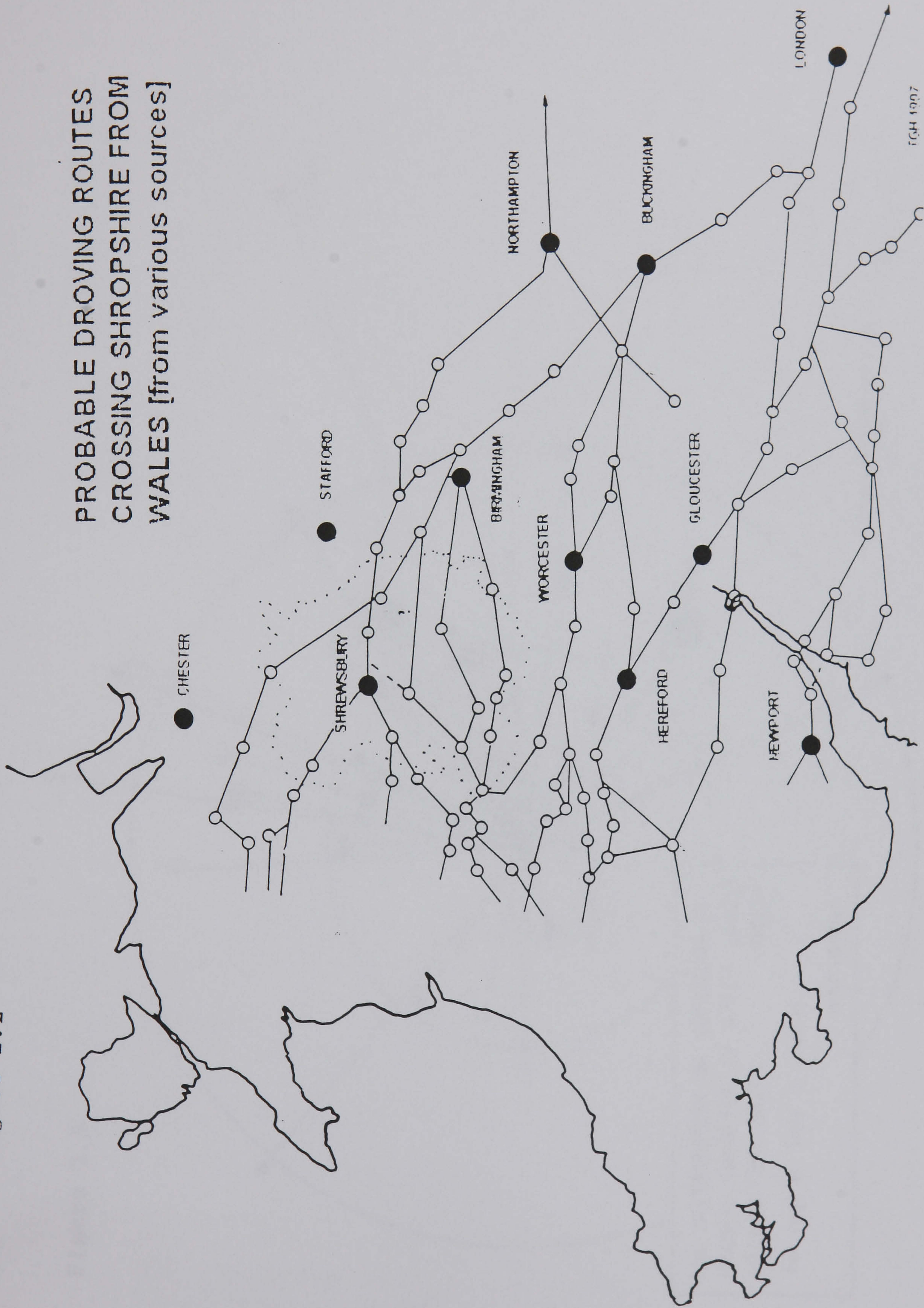
By the late seventeenth century, laws relating to carriers are listed in Nelson's Magistrate's Guide. These included a

<sup>35</sup> The original source material for the routes shown in Figure 2.2 appear to have been constructed on evidence from the late eighteenth and early nineteenth centuries and some routes were shown as straight lines. This suggest uncertainty on the part of the researcher, for example both Bonser and Thomas show a route which is a direct link between Leebotwood, on the Shrewsbury-Church Stretton road, and Wednesbury in the Black Country. It is possible that this route did cross the river Severn at Bridgnorth but from examination of lanes in the locality it is more likely that this route turned north along Watling Street to Pitchford and then north-westwards skirting Berrington to rejoin Watling street at Atcham bridge, this probable route is shown as a pecked line in Figure 2.2.

<sup>36</sup> PRO E178/6714, 3 Jas II (1687/88). This unique list of creditors was kindly donated for this thesis by Dr. S. Watts.



Figure 2.2





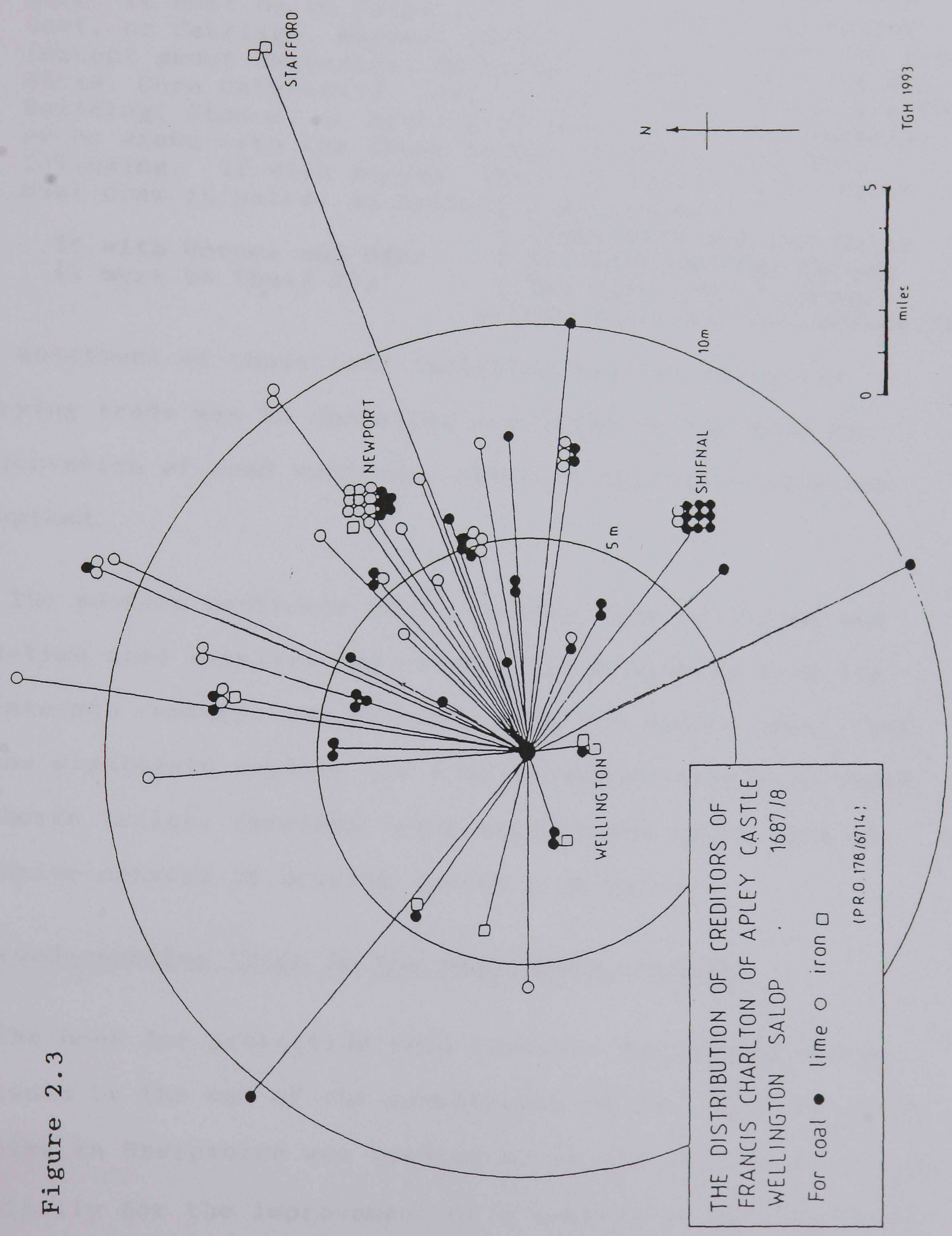


Figure 2.3



statement of the rates to be charged for carrying, which mayors and officers of market towns were required to display in a public place (3 & 4 William & Mary, cap 12). Also an act which controlled the number of horses used to draw waggons (7 & 8 William, cap 29) includes the statement:

'By this act, Carriages with Burdens are not to be drawn with above five horses at length; but if they draw with more, it must be in Pairs..... A travelling Waggon Cart, or Carriage, whereon Burthen shall be drawn for Hire (except about Husbandry, Manuring of Lands, carrying Hay, Straw, Corn unthrash'd, Coal, Chalk, Timber, Materials for Building, Stones, or Artillery) shall go in any highway, or be drawn with the above number of Horses and Oxen following. If with horses, then not above eight, which must draw in pairs, as hereafter mentioned.'

	( Eight Oxen and one Horse
If with Horses and Oxen	( Six Oxen and two Horses
it must be thus; Viz.	( Two Oxen and six Horses
	( Four Oxen and four Horses. <sup>37</sup>

The enactment of these laws indicates that an extensive carrying trade was in operation resulting in the need for preservation of road surfaces, which at this time were not turnpiked.

The sources mentioned above suggest that full-time and part-time road carriers had existed in Shropshire from the seventeenth century, and probably from the middle ages. That by the eighteenth century the road-transport system included packhorse trains, carriers using waggons and carts, and an extensive network of droving routes from Wales.

#### The road-carrying trade in the eighteenth century.

The need for protecting road surfaces was already being addressed by the end of the seventeenth century and the first turnpike in Shropshire was created by an act of 1725/6. It was principally for the improvement of a section of Watling Street

37 W. Nelson, The Office and Authority, pp. 377-378



between Crackley Bank, in the parish of Shifnal, and Shrewsbury. This section of road was part of one of the main routes linking Shrewsbury to London. After the preamble the act states that it was the soil conditions in the area that contributed to the need for improvement:

'... by reason of the Soil of the said Roads and Lanes, and the heavy Carriages frequently passing through the same, become so very much out of Repair, that many Parts thereof, even in the Summer Season, after great Rains, are impassable for Waggon and other Carriages.'<sup>38</sup>

There can be no doubt that improvement to this stretch of road was needed for two reasons. Firstly, because the section of road mentioned was passing from the dry light soils of east Shropshire to some heavy clay areas on the Shropshire coalfield. Secondly, because this section of road was subject to heavy wear by local industrial traffic transporting coal, iron and limestone to nearby towns such as those mentioned in the Charlton creditor's list. Although that list only gave values and not weights, it suggests that considerable tonnage was being delivered in the area. For example, two ironmongers of Stafford owed £63-12-01; Thomas Mills, an ironmonger of Newport, owed £61-10-00; and the total outstanding value of coal delivered to the town Shifnal was £7-18-4.

Throughout the eighteenth century further turnpiking of Shropshire roads was undertaken. By using a series of Shropshire maps, Acts of Parliament, written records, and by observation in the field, J. Clark has demonstrated how the

<sup>38</sup> An Act for Repairing the Roads therein mentioned, between Crackley Bank in the Parish of Idsall alias Shiffnall, and the Town of Shrewsbury in the County of Salop, (1725/6)



turnpike system developed throughout the county.<sup>39</sup> By using the list of acts and details of routes covered, which were contained in Clark's Appendix 1, it is possible to demonstrate in graphic form the amount of turnpiking activity which occurred in Shropshire between 1726, the turnpike mentioned above, and 1839. As Figure 2.4 indicates apart from the two early turnpike acts of the 1720's the main activity spans the period from the 1740's to the 1820's. However merely listing a number of turnpike acts does not give the full picture because one act may only relate to an improvement of one road. Therefore the number of different roads, or stretches of road, identified by Clark in each year have been assessed and the result shown as Figure 2.5. This demonstrates how the main period of activity in improving Shropshire's roads occurred in the period of the 1740's with falling activity in the 1750's and 1760's and then levels out for the rest of the period.<sup>40</sup>

As Figure 1.1 above illustrated, roads radiated in all directions from Shrewsbury, in the centre of the county, and these connected to all the Shropshire market towns. By comparing Clark's research with this map it can be seen that virtually all these radiating roads were turnpiked by 1758.

<sup>39</sup> J. S. Clark, 'Turnpike roads in Shropshire; Part of the development of communications in the West Midlands.' unpub. M.A. Dissertation, University of Leicester, Department of English Local History (1997).

<sup>40</sup> It is appreciated that the analysis of merely listing the number of roads covered by turnpiking legislation in any one year would be improved further if actual mileage could be undertaken. However the analysis does indicate clearly that the main turnpiking activity that affected the roads from Shrewsbury and which formed links with market towns within the county and beyond was undertaken in the mid-eighteenth century.



Figure 2.4

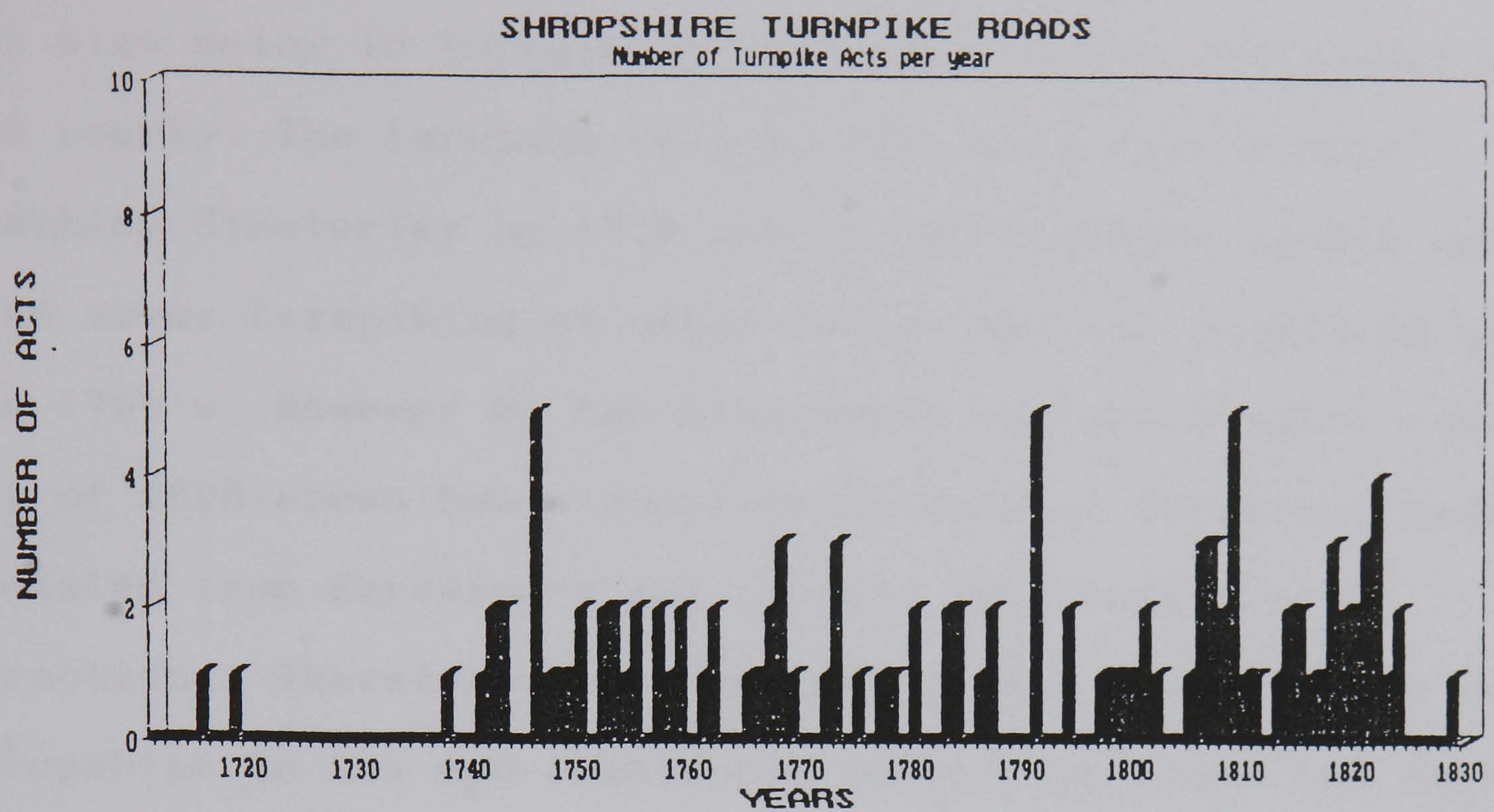
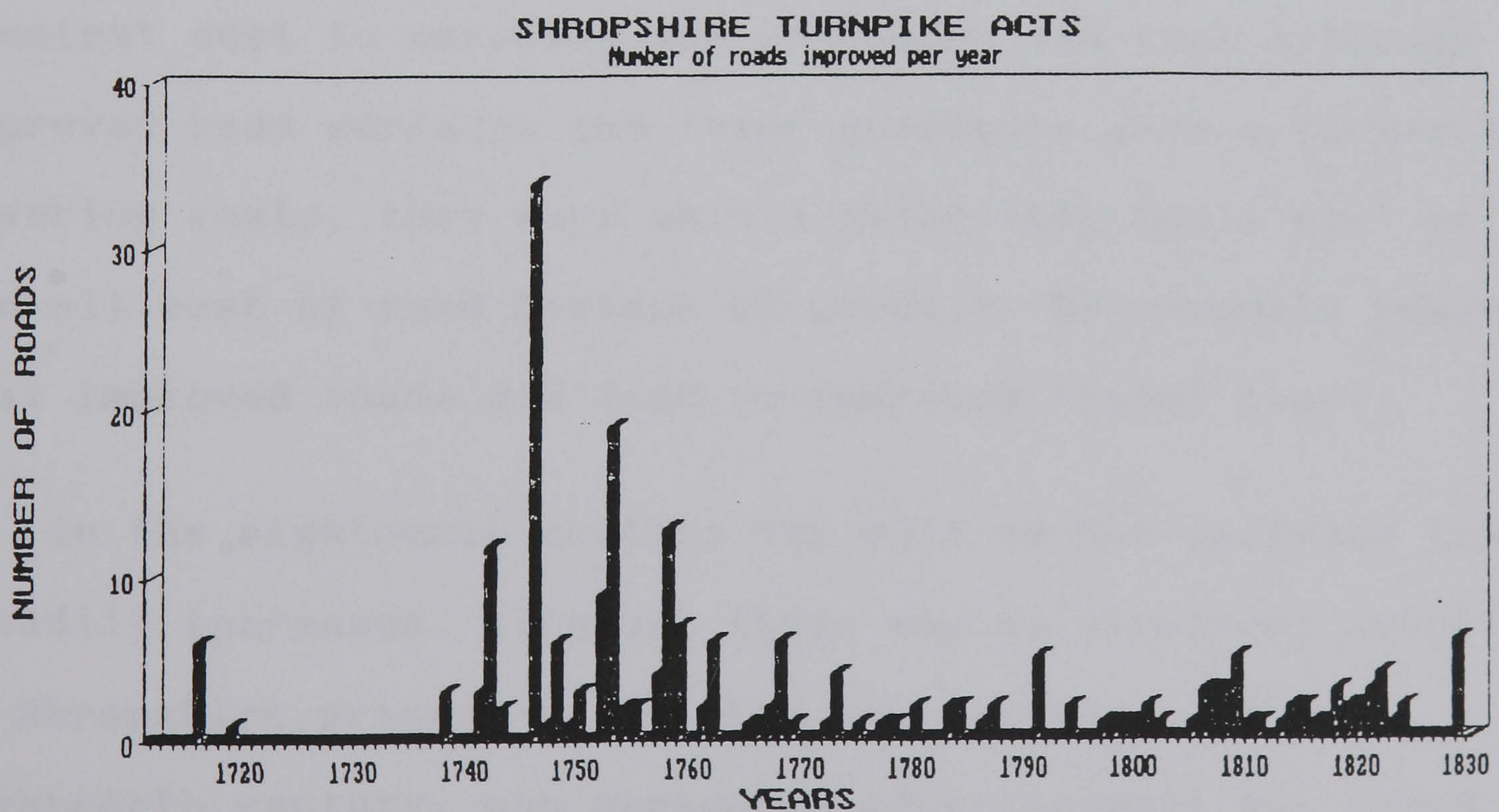


Figure 2.5





There were two exceptions, the route from Shrewsbury to market Drayton was only turnpiked as far as Shawbury by 1756 and turnpiking on this route was not completed until 1769. There was also delay in turnpiking the roads in the south-west of the county. The turnpike towards Bishops's Castle only reaching Minsterley by 1758 and in the Bishop's Castle and Clun areas turnpiking of other routes was not completed until the 1760's. However by the nineteenth century Baugh's county map of 1808 shows how a complete network of turnpike-roads radiated from Shrewsbury and crossed the county in all directions. Therefore the road improvements carried out in Shropshire in the mid-eighteenth century provided the carriers and coach proprietors with ideal routes along which goods and passengers could be conveyed.

One question that can be raised is: 'Did improved roads lower the cost of road-transport?' Gerhold argues that the greatest cost to carriers was provender and that although improved road surfaces and lower gradients were a factor in lowering costs, they were only a relatively small part of the overall cost of road haulage of goods.<sup>41</sup> He comments however that improved roads did lead to improved travel times.

In the eighteenth century the data on the carrying trade steadily increased. Although there was no directory specific to Shropshire printed before the last decade of the eighteenth century, one newspaper advertisement was found in the Shrewsbury Chronicle dated 12th November 1774. This gave

<sup>41</sup> Gerhold writing from the detailed papers of 'Russell's of Exeter' was able to explore the varied costs borne by a carrying business. Gerhold, Road Transport before, p. 127 ff.



useful information of the routes and timings of the London to Shrewsbury Flying Waggon, which took four and a half days for the journey, and gave some details of connecting services:

'The waggon will leave the Castle and Falcon, London every Monday and will be in Shrewsbury by 10 am on Friday, time enough to forward goods by different carriers to Oswestry, Welshpool, Bishop's Castle and all North Wales, Ellesmere, Wem Church Stretton and other parts of Shropshire. Returning from Bather and Powell's warehouse in Mardol every Tuesday morning. The Slow Waggon goes as usual by way of Shifnal, Wolverhampton, Walsall and Coventry and sets out every Wednesday morning. NB. The Oswestry, Welshpool and Ellesmere waggons all wait at Salop till the Flying Waggon come in.'<sup>42</sup>

This London service had apparently been operated by Richard Hawkesford whose daughter married John Bather in 1750. Family history information supplied by Benjamin Bather in 1994 stated that an ancestor, John Bather, went into partnership with his father-in-law in the London carrying trade. The further development of this Shrewsbury-based family business is discussed on pages 66-67 below.

#### London trade directories and carrier routes to Shropshire.

To study Shropshire road carriers in the period before the last decade of the eighteenth century, it was necessary to use London and provincial directories to assess how the county was linked into a wider transport network.

Since medieval times London had been an entrepot of trade and it is not surprising therefore that details of the earliest carrier routes are found in London directories. The

<sup>42</sup> SRRC. Shrewsbury Chronicle 12 Nov. 1774 in Watton's Newspaper Cuttings, vol. 1 p 407.



earliest known list of carriers was the Carriers Cosmography (1637), but it only mentioned two Shropshire destinations by name, Shrewsbury and Bridgnorth. Carriers for both towns operated from the same inn and may well have been the same person, but a second entry suggested that other carriers were operating to Shropshire. The information given was limited:

'The Carriers of Bridgnorth doe lodge at the Mayden-head in Cateaton St neare the Guildhall.'

'The Carriers of Shrewsbury doe lodge at the Mayden-head, Cateaton St neare Guildhall they come on Thursdaie.'

'The Carriers of Shrewsbury do also lodge at Bosomes Inn (Blossoms) they doe come on Thursdais, and there doe lodge Carriers that do travell to divers parts of the County of Shropshire and places adjoyning.'<sup>43</sup>

The first London directory which gives more information on the carrying services to Shropshire is Thomas De Laune's The Present State of London (1681). From this date there were an increasing number of directories which gave data on carrying services to and from London.

Chartres and Turnbull, using London directory entries, have suggested an overall ten-fold increase in the number of carrier services between 1715 and 1840.<sup>44</sup> This claim for a ten-fold increase has been challenged by Gerhold who pointed out the extreme difficulty in using the data contained in the London directories.<sup>45</sup> He re-worked the figures, basing

<sup>43</sup> J. Taylor, The Carriers Cosmography (1637).

<sup>44</sup> Chartres, 'Road Carrying in England'; Turnbull, 'Provincial Road Carrying'

<sup>45</sup> Gerhold, 'The growth of the London carrying trade,' pp. 392 ff.



his analysis upon the inn from which a carrier-service started, to which he added carrier's names and routes. From this method of analysis, he considered that the growth of carrying services was much less than that suggested by Chartres and Turnbull. Gerhold's method of analysis was suitable for directories which recorded carriers names, but before 1768 the only two Directories which did so were, De Laune's Directory (1681) and the Anglia Metropolis (1690).

Most London directories contained lists of carrier destinations; names of inns from which a service started; days of departure; and sometimes times of departure, but only from 1768 are the names of carriers listed on a regular basis. So before 1768, researchers who try to assess the volume of traffic are faced by considerable problems. How many carriers used more than one inn? How many carriers were in partnership and not providing discrete services? How many days mentioned are inaccurate.<sup>46</sup>

To demonstrate the growth of services to the Shropshire Area, a selection of London Directories, between the years 1637-1793, have been analyzed and the data placed into a computer database. The years and data which the selected directories contained are shown as Table 2.2. It needs to be realized however, that these early directories were not published at evenly spaced intervals, and only from 1749 can a

<sup>46</sup> In De Laune's directory, the agent tells of the problems he encountered at Blossoms Inn: 'There are some other carriers that lie at this Inn, whose Names, through the moroseness and disingenuity of the Master of the Inn, to whom Application was made, we cou'd not learn.' T. de Laune, The Present State of London (1681).



Table 2.2

LONDON DIRECTORIES, 1637-1793 - ANALYSIS OF DIRECTORY ENTRIES  
FOR INNS AND CARRIERS WHICH SERVED THE SHROPSHIRE AREA

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Year	Inns named	Number of Inns	Day of arrival	Day of departure	Time of departure	Name of Carrier
1637	*	6	*	?		
1681	*	14	*	*		*
1690	*	12	*	*		*
1722	*	10		*		
1732	*	13		*		
1738	*	15	*	*	*	
1749	*	15		*		
1760	*	15		*		
1768	*	20		*	*	
1780	*	15		*	*	
1785	*	14		*	*	*
1788	*	10		*	*	*
1793	*	21		*	*	*

---

An asterisk indicates the type of data which was listed in the directory of that year. The number of inns were those listed which served Shropshire area destinations.

selection be made on a more regular basis. Those used in the following analysis are roughly at ten yearly intervals.

In the London directories which listed named carriers, it is probable that the recorded destination was their home-base, but before the 1790's there is no clear indication of the route which they followed, or the places where they may have stopped en-route.

Partnerships and family businesses.

Where named carriers were listed in London directories, it is possible to suggest that some were run by family groups or as partnerships. For example in 1681 a William, and a Thomas Chetwood were shown serving two Shropshire destinations, Newport and Drayton, and in 1681 and 1690 a Thomas, and a John Badeley undertook a service to Newcastle-under-Lyme. In both



of these cases it would appear to be one service operated by different family members. Also in 1681 five named carriers left the Bell in Wood Street for Shrewsbury, all on the same day; this also suggests that a partnership may have existed, especially as three of them were, William, Thomas and Richard Lloyd. In 1690 there were three carriers to Shrewsbury operating from the same inn on Thursdays, of whom two were listed as John Symonds senr. and one as John Symonds junr. It seems highly probable that they, and other carriers which are not so obvious, were working in partnership.

Bailey's Western and Midland Directory (1783), contained an entry which stated that 'Bather and Powell were London Carriers from Shrewsbury'.<sup>47</sup> The Shrewsbury newspaper advertisement mentioned on page 62 above showed how a London flying-wagon service operated from Bather and Powell's warehouse in the Mardol, Shrewsbury.<sup>48</sup> From family information supplied by Mr. Bather it was stated that a partnership was originally formed between a John Bather and his father-in-law, Richard Hawkesford. This partnership must have come to an end with the death of Richard Hawkesford in 1780 when John Bather was fifty-four years old. It would appear that, from about that date, a new partnership was formed between John Bather and Thomas Powell. John Bather appears to retire from this second partnership by 1785 when Bailey's London Carrier List, only mentions the name Powell

<sup>47</sup> Bailey's, Western & Midland Directory of Merchants and Tradesmens's Useful Companion (1783).

<sup>48</sup> The development and location of Shrewsbury warehouses is discussed in chapter 5 below.



as the Shrewsbury carrier from The Castle & Falcon Inn.<sup>49</sup>

A study of the Bather, Powell and Hawkesford family trees (Appendix 2) indicates that these Shrewsbury-based London carriers were men of substance. For example, John Bather was descended from an upwardly mobile family of yeoman farmers.<sup>50</sup> Richard Hawkesford, his father-in-law, was described in the Bather family papers in 1753 as an inn-keeper and apparently lived at Crackley Bank in the parish of Shifnal. By his death Thomas Bather and other family members were describing their position in society as 'Gent' and by judicious marriage to various clergy and gentry families the Bather family become part of the Shropshire 'squirearchy'. His son John Bather baptized 23rd October 1751 became vicar of Meole Brace and a burgess of the borough of Shrewsbury. His grandson Edward Bather also became vicar of Meole Brace.<sup>51</sup>

<sup>49</sup> Bailey's Carriers List, a new and correct alphabetical guide to all the stage coaches, waggons, coasting vessels, etc. in London (1785).

<sup>50</sup> A variety of sources had been used by Mr. Benjamin Bather to create his family tree. His original research was checked and enhanced by further research undertaken by Margaret Hill in 1995. In the Bather pedigree created by Joseph Morris it stated of John Bather: 'Previous to the introduction of Canals or Coaches, Mr. John Bather was then the great carrier by Waggons from Shrewsbury to London and from London to Shrewsbury, in which business, by his great industry and integrity he accumulated a considerable fortune. When the Advowsan of Meole and other estates were sold by the Viscountess Malpas (dr. and heir of Sir Francis Edwards, Bart) Mr. Bather purchased the advowsan and their estates in the parish of Meole Brace and died there, highly respected, 31st January 1818 aged 84. (He was baptized at Little Ness on the 30th June 1726).' J. Morris (1792-1860), Genealogical Manuscripts, MSS. 4077-4086, (n.d.).

<sup>51</sup> Edward Bather became a burgess of Shrewsbury borough, the Archdeacon of Salop, Prebendary of Lichfield, and Lord of the Manor of Meole Brace. Edward was married twice, firstly to the daughter of Rev. Robert Hallifax, vicar of Standish, Gloucs, and secondly to the daughter of the Bishop of Lichfield.



Thomas Powell (Appendix 2 page 4), with whom John Bather formed the second partnership, was apparently from a higher status family than Richard Hawkesford the innkeeper. He was the eldest son of Rev. Ralph Powell, rector of Kirk Ireton in Derbyshire. In 1771 Thomas Powell married Anna Pearson, the daughter of Rev James Pearson, vicar of St Julians, Shrewsbury.<sup>52</sup> Like the upwardly-mobile Bather family, Thomas Powell, by his death in 1800, was also using the title "Gent".

#### The London directories - inns and other starting points.

For the analysis of the data from London, a computer database of 1,271 carrier routes to the Shropshire area was constructed from twelve London directories. These spanned the years 1636-1788 and with them two further directory lists of carriers for the year 1793 were analysed.

The analysis showed that the same carrier could leave for a destination, or to places en-route to that destination, on the same day from various inns. In the period 1636-1788, forty inns were listed in London from which carriers departed for the Shropshire area (Table 2.3). By combining the database analysis with an examination of maps such as John Rouque's

<sup>52</sup> Thomas Powell appears to have run the Shrewsbury to London twice weekly carrier-service as an individual from 1785, to about the time of his death in 1800. In Barfoot and Wilkes, The Universal British Directory; 2nd edn, 1st issue (1793), Powell is shown running the Shrewsbury service from the Castle and Falcon inn, Aldersgate St. This route is confirmed in T. Minshull's Shrewsbury Guide and Directory (1793) when the London waggons were still listed as leaving 'Powell's warehouse'. However by 1804 the Shrewsbury entry reads: 'Messrs Barton and Co's (late Mr. Powell's) London Waggons, from the Warehouse, Mardol Quay, leave Shrewsbury, on Monday evenings at 7 o'clock, and Friday mornings at ten o'clock;' T. Minshull, Shrewsbury Guide and Directory (1804), p. 78.



Table 2.3

LONDON INNS AND WAREHOUSES FROM WHICH CARRIERS OPERATED TO  
SHROPSHIRE AREA 1637-1793.

CODE	NAME OF INN	NAME CHANGE	LOCATION OR STREET NAME	MAP No.	L.S. No.
AX	Axe		Aldermanbury	17	[ 60]
BB	Black Bear Warehouse *		Picadilly	off map	[ 3131]
BE(S)	Bell		Smithfield	3	[ 2928]
BE(W)	Bell		Wood St	14	[ 2817]
BE(WK)	Bell		Warwick Lane	20	[ 2865]
BL	Blossoms		Lawrence Lan	22	[ 3528]
BBG	Blue Boar & George (Geo & B.B.)		High Holborn	off map	[ 449]
BM	Bull & Mouth		Aldersgate	12	[ 204]
BR	Bear	(White Bear)	Basinghall St	18	[ 2694]
BRS	Bear & Ragged Staff		Smithfield	1	[ 2744]
CA(S)	Castle		Smithfield	28	[ 4491]
CA(W)	Castle	(Pickfords)	Wood St	15	[ 4496]
CF	Castle & Falcon		Aldersgate	13	[ 4498]
CK	Cross Keys		Wood St	21	[ 313]
GD	Green Dragon		Bishopsgate	off map	[ 7862]
GE(A)	George	(White Hart)	Aldersgate	8	[ 6899]
GE(S)	George	(George & Dragon)	Smithfield	7	[ 7072]
GE(SN)	George	(George & Dragon)	Snowhill	6	[ 6963]
GH	Gerrard's Hall		Basing Lane	27	[ 453]
GMS	Green Man & Still		Oxford Street	off map	[ 7999]
IA	Ipswich Arms		Cullum St	off map	[ 9132]
KH	King's Head		Old Change	25	[ 9580]
MH	Maidenhead		Cateaton St	23	[10230]
MW	Moore's Warehouse(Hog in Pound) *		Oxford Road	off map	[ 8784]
NWHC	New White Horse Cellar *		Picadilly	off map	[ 1849]
OWHC	Old White Horse Cellar		Picadilly	off map	[11069]
OA	Oxford Arms		Warwick Lane	19	[11149]
PP	Pewter Platter		St John St	off map	[11363]
RA	Ram		Smithfield	2	[11999]
RC	Rose & Crown	(Rose)	High Holborn	off map	[12634]
RO	Rose		Smithfield	4	[12578]
RO(H)	Rose	(Rose & Crown)	Holborn	10	[12624]
SH(F)	Saracen's Head		Friday St	24	[13065]
SH(S)	Saracen's Head		Snowhill	11	[ 1165]
ST	Swan with Two Necks (Swan)		Lad Lane	16	[ 1309]
SW(H)	Swan	(White Swan)	Holborn Bridge	5	[14266]
SW	Swan		Nortonfalgate	off map	[14283]
WB	White Bear *		Picadilly	off map	[16014]
WH(C)	White Horse		Cripplegate	9	[16238]
WH	White Horse		Friday St	26	[16253]

Code = Code used to identify inns in computer database.

Map No. = number shown in Figure 9

L.S.No. = the code number used by Bryant Lillywhite in his book  
London Signs, (1972) London.

\* Indicates locations listed in the Universal British Directory (1793) under "Coach and Waggon Inns" at which goods were delivered or collected but these inns did not act as the final destination or start point of a carrier or coach route. The phrase used was "No Coaches or Waggon of any kind go from this place".

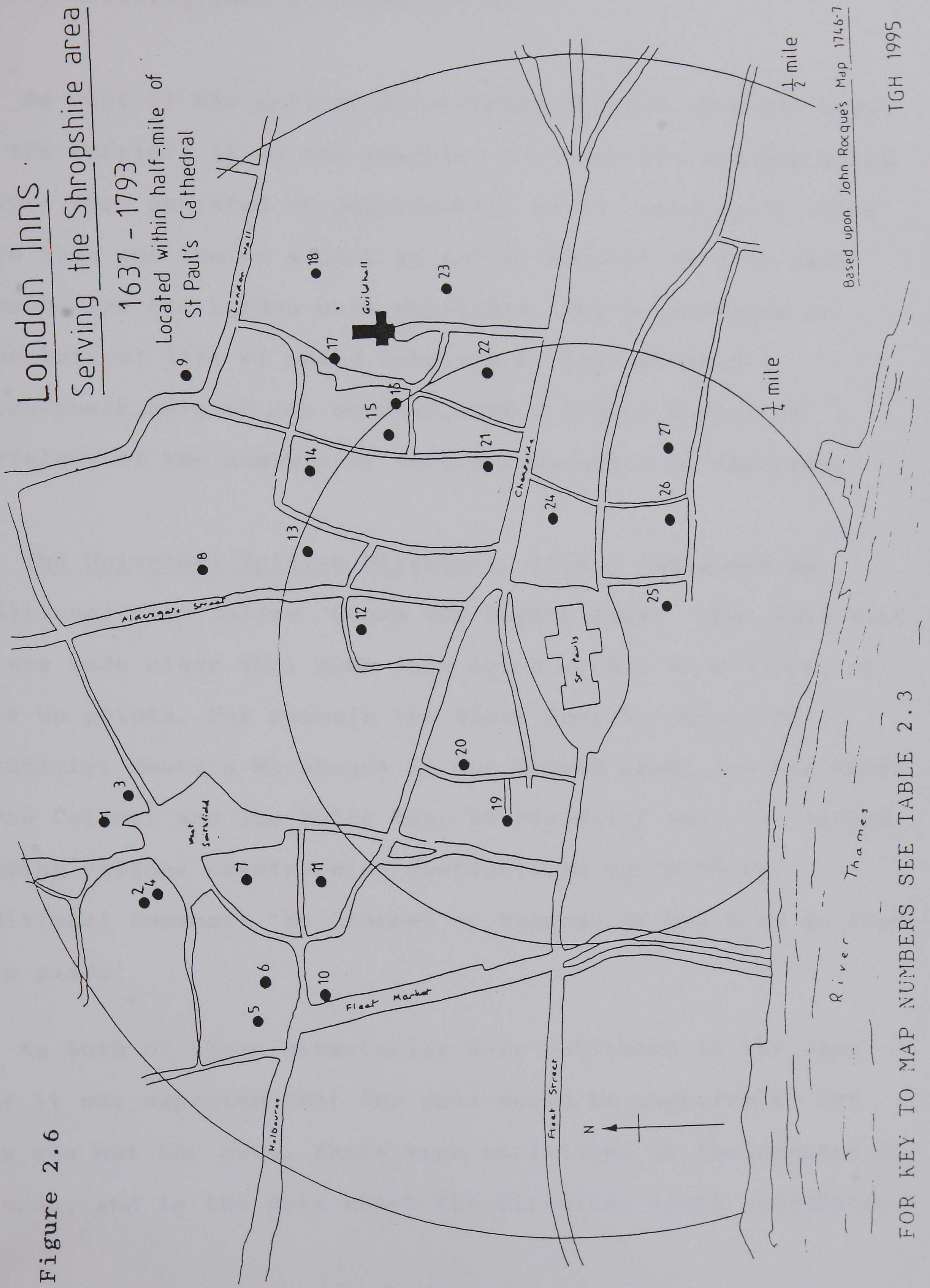


Plan of the city of London and Westminster (1746), Horwood's Map of the city of London (1813), and information on London inns contained in Lillywhite's book, London Signs (1972) it was possible to identify the location of the inns in the central area of the City (Figure 2.6). This showed that twenty-seven of the inns which served the Shropshire area were located within half a mile, and twelve were within a quarter of a mile, of St Pauls Cathedral. This locational proximity demonstrated how easy it was for carriers to collect or deliver goods at a number of inns and, because various inns specialized in providing services to different parts of the country, to transfer goods from one area to another.<sup>53</sup>

The fact that more than one inn was used by individual carriers, was made clear in the directories which listed carriers by name. For example in 1681, Richard Rogers operated from the Bull and Mouth (12) to Worcester and from the White Swan (5) to Leominster; also a Mr. Rogers was recorded at the George (8) for a route to Ludlow. When this data was checked against the 1690 directory entries it showed that Mr. Rogers left the Bull and Mouth for Worcester and Leominster and also left the George for Ludlow. In all cases these journeys started on a Saturday and therefore indicated that, although three inns were listed, the carrier was one and the same person. It is clear, from examination of later routes which operated in the Shropshire area, that Rogers followed a

<sup>53</sup> For example the Castle and Falcon (Figure 2.4 no 13) used by the Shrewsbury carriers also catered for carriers from Stamford, Brecknock and South Wales. Just around the corner was The Bell, Wood Street (map no. 14) which, in addition to serving west-Midland carriers, also served carriers from Leicester, Derby, Buxton, Stockport, Rochdale and Bolton.







logical route, namely from London to Worcester, then on to Leominster, and finally to Ludlow. This suggested that there was a danger in assessing the growth of the carrying trade by merely counting inns and destinations.

As most of the earlier directories did not show the name of the carrier, it is not possible to calculate exactly which routes were operated by partnerships or by individuals using more than one inn as a pick up point. However in 1793 two directories for London were published, which contained an alphabetical list of named carriers.<sup>54</sup> This allowed a cross-check between two sources, and a higher degree of certainty of the numbers of carriers actually on the road.

The Universal British Directory, (U.B.) contained an additional list called 'Coach and Waggon Inns'. From this list it was made clear that some inns acted merely as delivery or pick up points. For example the Black Bear Warehouse in Picadilly; Moore's Warehouse in the Oxford Road; The New White Horse Cellar; and The White Bear in Picadilly were all listed showing various country-wide destinations but with an additional comment: 'No Coaches or Waggon of any kind go from this place'.

As both of these directories were published in the same year it was expected that the data would be comparable, but this was not the case. There were variations in the numbers of records, and in the data which the directory lists contained.

<sup>54</sup> Universal British Directory (1793); Lowdne's Directory of London (1793).



Some were obviously typographical errors, e.g. Banbury was listed as Danbury in the U.B. A comparison of the entries is shown below. (Table 2.4).

TABLE 2.4

A comparison between the Carrier List in Lowdne's Directory of London, 1793 with the Carrier List in the Universal British Directory, 1793.

Directory	Number of Entries	Number of Carriers	2 Inns used	3 Inns used	Over 3 Inns used
Lowdnes	407	378	27	6	1 x 4
Universal British	353	325	19	5	1 x 5

An example of the problems encountered between these two sources is shown by an analysis of the records for a carrier called 'Ward' (shown as Ephraim Ward in the entry for the Oxford Arms), who operated routes to Birmingham and Oxford. In Lowdne's alphabetic carrier list Ward's destinations were shown as:

Destination	Inns used & Map No (Fig. 2.6)
Oxford	Oxford Arms, (19) Bell, Warwick Lane, (20) Gerrard's Hall, Basing Lane, (27)
Chipping Norton	Bell, Smithfield, (3)
Oxford & Birmingham	Bell, Smithfield, (3)

This suggests that Ephraim Ward was using the four inns listed. However in the Universal British alphabetical list Ward's destinations were shown as:



Destination	Inns used
Oxford	Oxford Arms, (19) Bell, Warwick Lane, (20) Gerrard's Hall, Basing Lane, (27)
Chipping Norton	Bell, Smithfield, (3)
Shipston on Stour	Rose, Smithfield, (4) Bell, Holborn, (not mapped)
Oxford & Birmingham	George, Snow-hill, (6) Bell, Holborn, (not mapped)
Coventry	George, Smithfield, (7)

This raised questions, had there been a change in Ward's London collection points between the production dates (although the same year) of the two directories? did the lists contain faulty data? and if so which one? Fortunately in the U.B. an additional list of 'coach and waggon inns' showed which carriers used their facilities, and the places they served. This acted as a cross-check to the alphabetic list, and also allowed a more detailed analysis than has previously been possible. At first sight the U.B. alphabetic list had suggested that the carrier called 'Ward' operated from eight different inns, but by cross checking the entries to the 'coach and waggon inns list' it was possible to discover how confusion had arisen about the physical location of certain inns and the names of carriers who operated from them.

The reference in the UB alphabetic list to The Bell, Holborn, is clearly a typographical error, and should read, The Bell, Smithfield (3). When cross checked, no carriers were recorded with routes to Shipston, Oxford or Birmingham from The Bell, Holborn. For this reason The Bell, Holborn, which was over half a mile from St. Paul's cathedral, has not been mapped as there is no evidence to suggest that it was ever used by Shropshire-area carriers.



It can be noted that, although virtually next-door to each other, the George, Smithfield (7) and the George, Snowhill (6) were two different inns. The coach and waggon inns list showed that the former was run by an inn-keeper called Rewnsley and the latter run by an innkeeper called Fernehough. It also stated that Fernehough ran a carrier route to Oxford and Birmingham. However in the alphabetic carrier list the name Fernehough did not appear and this route was listed as operated by Ward. It seems likely therefore that Fernehough acted as the agent for Ward.

The examination of the evidence suggested that in the U.B. the carrier Ward operated from six inns, or if it is accepted that Ward should be named instead of Fernehough at The George, Snowhill, from seven inns. The variation between the two lists appeared therefore to be the inns, The George, Smithfield (7) and The Rose, Smithfield (4). The Rose, Smithfield appeared in both the alphabetical carrier list and in the inns list. The days and times of departure suggest that Ward's journey started by loading at The Rose on Thursdays at 6 am and then at The Bell, Smithfield at 10 am.

Further confusion about Ward arose because there was that another carrier who was sometimes listed as Ward or Wood who operated a route to Coventry. At first sight it appeared that this was the same person as Ephraim Ward, whose route to Birmingham was via Oxford and could have included Coventry. However by comparing all the listings it showed that a J. & W. Ward travelled on Thursdays at 10 am from the George, Smithfield (7), and the White Horse, Friday St. (26). From the 'coach and waggon inns list' the route followed by J.& W.



Ward was heading for Stoke-on-Trent and the Potteries, and was shown as passing through Coleshill, Lichfield, Rugeley and Uttoxeter and would therefore have initially followed Watling Street via St. Albans. It is considered that this was not the same Ward, who followed the Oxford/Birmingham Route.

By sorting the database in a number of ways, it was possible to reach the conclusion that there were two primary routes followed by carriers from London to towns in the Shropshire area. One route went north from the city of London via Islington, and then north-west following Watling Street to St. Albans and Weedon Beck, then on to Coventry from where two further routes diverged. One route turned westwards to Birmingham, and another north-westwards to Lichfield and then on through Staffordshire and Cheshire to Chester, Liverpool and Manchester. A second major route from London went west from the city through Picadilly and Oxford Street to Oxford. Oxford then became the hub of a number of routes which went either northwards to Birmingham, or westwards to Worcester. It is on the basis of this analysis that it is argued that the entry for Coventry for a carrier called Ward should be proper to J. & W. Ward, or Wood and not Ephraim Ward.

To the unwary, further confusion can arise over the multiplicity and changes of inn names. For example: The Swan with Two Necks (16), was shown in some directories as the Swan; The George and Boar in Holborn was sometimes recorded as The Blue Boar and George, or merely, The George; the George in Aldersgate (8) was sometimes shown as the George and White Hart. Variations of London inn-names can be solved to some extent by reference to Lillywhite's book on London inn signs.



For example, he stated that the original name of The George in Aldersgate had been The White Hart, but that it appeared as The George after 1708.<sup>55</sup>

As well as providing a cross-check to the alphabetical carrier lists, the U.B. list of 'Coach and Waggon Inns' indicated the routes followed, and at what inns carriers from the Shropshire area could link up with carriers from other regions. Without detailed data on the destinations of particular consignments from the Shropshire area, it is not possible to plot how transfers may have worked, but Gerhold's research has shown that west-country traders, such as the manufacturers of sail-cloth, often sent goods by road, via London to destinations country-wide.<sup>56</sup>

The data from the list of 'Coach and Waggon Inns'; coupled to the carrier lists in the U.B. 1793 allows a researcher to build a detailed picture of the network of routes which radiated from London. In the last decade of the eighteenth century, the Shropshire area was served by twenty-two of the forty inns listed in Table 2.3; of which four were merely pick-up or delivery points. The routes from the eighteen inns serving the area are shown at Figure 2.7 which clearly shows how the trading communities in the Shropshire area could maintain contact with customers in a vast range of places via the London inns which served their area. Further, it is known that transfers of goods within London between other inns and wharfs was achieved by carts.

<sup>55</sup> B. Lillywhite, London Signs (1972), p. 205.

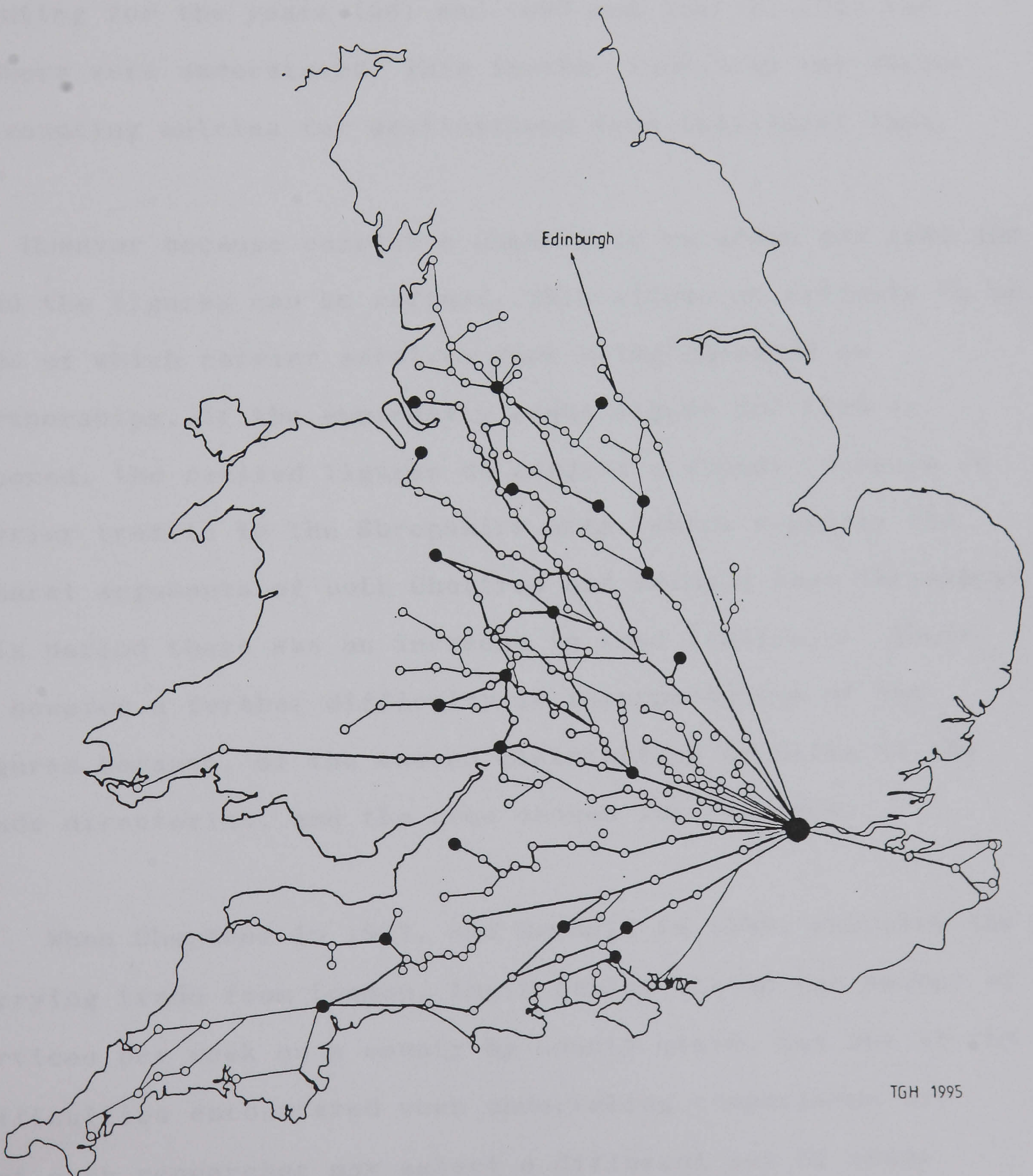
<sup>56</sup> Gerhold, Road Transport before the Railways, pp. 96-98.



Figure 2.7

Carrier routes listed in 1793 for London Inns which served the Shropshire Area and its adjacent provincial centres.

SOURCE - UNIVERSAL BRITISH DIRECTORY (1793)





From the analysis of London Inns, and the mapping of probable routes, it is possible to estimate the number of services which served the Shropshire area. In Table 2.5 the number of carrier services, per week, operating from London to the Shropshire area have been listed. It will be noted however, that while the number of services rises steadily from 1732 to 1768, the raw figures between 1637 and 1732 appear to be unreliable. It would appear that there may be multiple counting for the years 1681 and 1690 and that in 1722 the numbers were understated. This further indicates the danger of counting entries for destinations from individual inns.

However because carrier's names were recorded for 1681 and 1690 the figures can be refined, This allows an estimate to be made of which carrier services were being operated as partnerships. If the apparently rogue figure for 1722 is ignored, the revised figures do suggest a steady increase in carrier traffic to the Shropshire area, which supports the general arguments of both Chartres and Gerhold that throughout this period there was an increase in road traffic.<sup>57</sup> There is however a further difficulty in interpretation of the figures because, of the uneven distribution of dates of the trade directories, and the area chosen for research.

When Chartres in 1977, and Gerhold in 1988, analysed the carrying trade from London, their tables listed the number of services per week on a county by county basis, but one of the difficulties encountered when undertaking comparisons is, that each researcher may select a different set of trade

<sup>57</sup> Chartres, 'Road carrying in England', pp. 73-94; Gerhold, 'The growth of the London carrying trade, pp. 392-410.



Table 2.5

NUMBER OF CARRIER JOURNEYS PER WEEK  
FROM LONDON INNS SERVING THE SHROPSHIRE AREA, 1637-1780

Showing number of journeys from London where the routes are composed of the amalgamated destinations from individual inns, the percentage variance between directory-years and revised figures as discussed in the text. With such a small population however the percentage variation is not very significant.

Year	1637	1681	1690	1722	1732	1738	1749	1760	1768	1780
Number	14.0	27.8	26.0	12.0	27.0	35.0	40.0	46.0	87.0	49.0
%		+127	-12	-57	+133	+29	+14	+24	+71	-41
Revised	14.0	19.0	18.0		28.0	36.0	41.0	46.0	51.0	51.0
%		+36	-5		+55	+29	+14	+12	+24	=

Table 2.6

CARRIERS PER WEEK FROM LONDON INNS TO THE COUNTY OF SHROPSHIRE, 1637-1798

With comparison to estimated frequency created by Chartres and Gerhold

Year	1637	1681	1690	1715	1738	1760/65	1793/98
Hill original	3.00	20.00	10.00		14.00	12.00	10.00
Hill revised	3.00	8.00	4.00		14.00	12.00	10.00
Chartres <sup>1</sup>	3.00	7.16	-----	9.00	-----	-----	-----
Gerhold <sup>2</sup>	-----	7.20	3.30	-----	5.50	9.00	3.00

Note: The figures in this table relate to the County of Shropshire only.

<sup>1</sup> J. A. Chartres, 'Road carrying in England in the seventeenth century: myth and reality,' Economic History Review, 2nd series, XXX (1977) p 77.

<sup>2</sup> D. Gerhold, 'The growth of the London carrying trade, 1681-1838,' Economic History Review, 2nd series, XLI, 3 (1988) p 400.



directories. The Shropshire area overlapped a number of county boundaries, therefore a direct comparison with the findings of other scholars was not possible. However, by extracting from the database the figures for the county of Shropshire some comparison could be achieved. The results in Table 2.6 indicate that the figures used in this thesis were comparable for the period 1638-1690, although in the period 1715-1798 they were higher than those calculated by Gerhold. His figures in Table 2.6 suggested that the frequency of routes to Shropshire dropped from nine to three between 1765 and 1793. The result from the analysis of the database suggested that there was a drop from twelve to ten between 1760 and 1793. The cause for this apparent reduction in services has not been resolved, but it could be due to the fact that from the 1760's an increasing number of Provincial Trade Directories reduced the need to list country-wide routes in London directories.

Undertaking this analysis of London directory entries for the Shropshire area has highlighted the problem of assessing the number of carriers actually upon the road in any one week, and supports Gerhold's misgivings mentioned on page 61 above.

The analysis demonstrated the many difficulties of using early Trade Directories as a statistical source and shows that to undertake such an exercise there is a need to study the dynamic nature of inn-names themselves; their specific locations; the possibility of partnerships; that some carriers operated from more than one inn; and that, what at first sight may appear to be a final destination, may in fact be a place called at en-route.



To state that there was increase in the numbers of road-carriers through the seventeenth and eighteenth centuries because of economic expansion is a logical argument. However, it can also be argued that the rising figures are in fact an increase in the recording of carriers in Trade Directories!

#### Midland and northern provincial carrier routes in 1766-1774

From 1767, provincial directories can be used to supplement the data that can be extracted from the London directories and this allows a much fuller picture of carrier routes in the Shropshire area to be calculated. Sketchley's Birmingham Directory (1767) contained a list of named carriers, some of which were of 'national' status; and listed other carriers whose extent of business was categorized as 'middling'.<sup>58</sup> Four of these 'middling' carriers undertook routes to towns in Shropshire, and five linked Birmingham to Bewdley on the River Severn. Of these, three operated twice a week, one twice a week, and for one the days were not specified. This intensity of traffic to Bewdley, with at least seventeen journeys a week, demonstrated the importance of the town as an inland port for Birmingham.

Within Shropshire, Bridgnorth was the base for Humphrey Raybould, who travelled to Birmingham three times a week on Mondays, Wednesdays and Fridays, returning on Tuesdays, Thursdays and Saturdays. This suggests that his carrying business was a full-time occupation and that he served as a further link between Birmingham and waterway traffic on the river Severn. The Shropshire town of Newport was also listed

<sup>58</sup> J. Sketchley, Birmingham, Wolverhampton and Walsall Directory (1767).



as a regular destination, although it did not have any waterway links in this period. Two named carriers were listed, Jacob Pountney who arrived in Birmingham on Mondays, Tuesdays, Thursdays and Fridays and returned the same day, he too appears to be fully employed in the carrying business; but Martin Charman, who travelled into Birmingham on a Thursday and returned on a Friday appears to be a part-time carrier.<sup>59</sup>

For routes to Shrewsbury only one 'middling' carrier was named; Robert Dawes, who apparently arrived in Birmingham on a Friday and left Birmingham for Shrewsbury on a Monday. According to the law, carriers were not supposed to travel on a Sunday, although some obviously did. Robert Dawes may have stayed in Birmingham over the weekend, or more likely he lived there and provided an outward service. The same pattern also applied to Oliver Whittle who connected Birmingham to Shifnal. From details held about Shifnal families he does not appear to have been a resident. Another answer may be that these carriers were not Birmingham residents but that their routes were 'passing through' Birmingham, and that they travelled on to a further destination not specified.

In Sketchley's Directory (1767) there were sixteen named 'national' carriers who travelled to London, compared with twenty un-named carriers listed with a Birmingham destination in the London Directory (1768).<sup>60</sup> But as is argued above,

<sup>59</sup> Newport was located on the Shropshire-Staffordshire border and on the main road from Wolverhampton to Chester, it was also fairly close to the industrial area of the east-Shropshire coalfield. This link by 'middling' carriers to Birmingham were probably supported by 'local' carrier services which are not shown in the directories of the period.

<sup>60</sup> Baldwin's, New Complete Guide (1768).



some of those listed could have been partnerships or were carriers who operated from more than one London Inn.

What was not revealed by studying the London directories was the existence of cross-country routes linking provincial centres. In Sketchley's directory there were thirteen 'national' carriers who travelled over long distances. One of these was W. Weston who apparently served thirty-six towns. His listed destinations stretched from Bristol and Bath in the south-west to York, Newcastle-upon-Tyne and Edinburgh in the north-east. He was recorded as serving destinations in Lincolnshire, Nottinghamshire and Yorkshire. Whether he actually travelled to all these towns or acted as agent for other linked carrier services or coastal shipping is not made clear, coastal shipping links are discussed in chapter four. Another passing-through route was undertaken by W. Judd. He apparently travelled into Birmingham from Stafford in the north-west, and then on to destinations in the east and south such as Kings' Lynn, Oxford and Aylesbury. By 1777, Judd had extended his carrying business into Shropshire, with a route between Stafford and Whitchurch.

Weston and Judd were two carriers who appeared to have been based elsewhere and passed through Birmingham, but all the remaining eleven 'national' carriers appear to have routes that ended in Birmingham. Of these, eight were shown with detailed lists of the towns which they served en-route, but three merely give one destination. Robert Spencer to Brigg (Lincs.), John Alexander to Cambridge, and Blakeman & Allsop to Market Deeping (Lincs.).



Weston, mentioned above, and J. Twiss, travelled to Edinburgh, but unlike Weston, Twiss appears to have followed a north-westerly route through Staffordshire, Cheshire and Lancaster. It is not clear whether this route continued northwards via Carlisle, which was not listed, or then crossed the Pennines to join other routes to Edinburgh. He is listed with destination east of the Pennines such as, Keighley, Halifax, Huddersfield, York and Newcastle-upon-Tyne. Without data from these northern towns or Edinburgh it is impossible to confirm whether these destinations were actually served by Twiss. It could be that both Twiss, and Weston, operated in partnership with Yorkshire-based carriers, or with a coastal shipping firm which carried the goods on to Edinburgh from river ports, such as York or Hull. The most likely routes of the 'national' carriers working from Birmingham in 1767 are mapped as Figure 2.8.<sup>61</sup>

Sketchley's Birmingham directory (1767) only records four destinations in Shropshire: Newport, Shrewsbury, Shifnal, and Bridgnorth. Baldwin's London directory (1768) however, listed thirteen Shropshire destinations, and when these were mapped in conjunction with the data from Birmingham, a wider network begins to appear covering most of Shropshire's market towns (Figure 2.9). It also shows that a route had been developed which served mid-Wales, with destinations in

<sup>61</sup> Although it was not possible to map exact routes, the technique used was: Each carrier was treated as a separate individual and the towns shown for his name plotted first. The towns were then joined by lines which were considered to be the route by reference to the topography of the land.

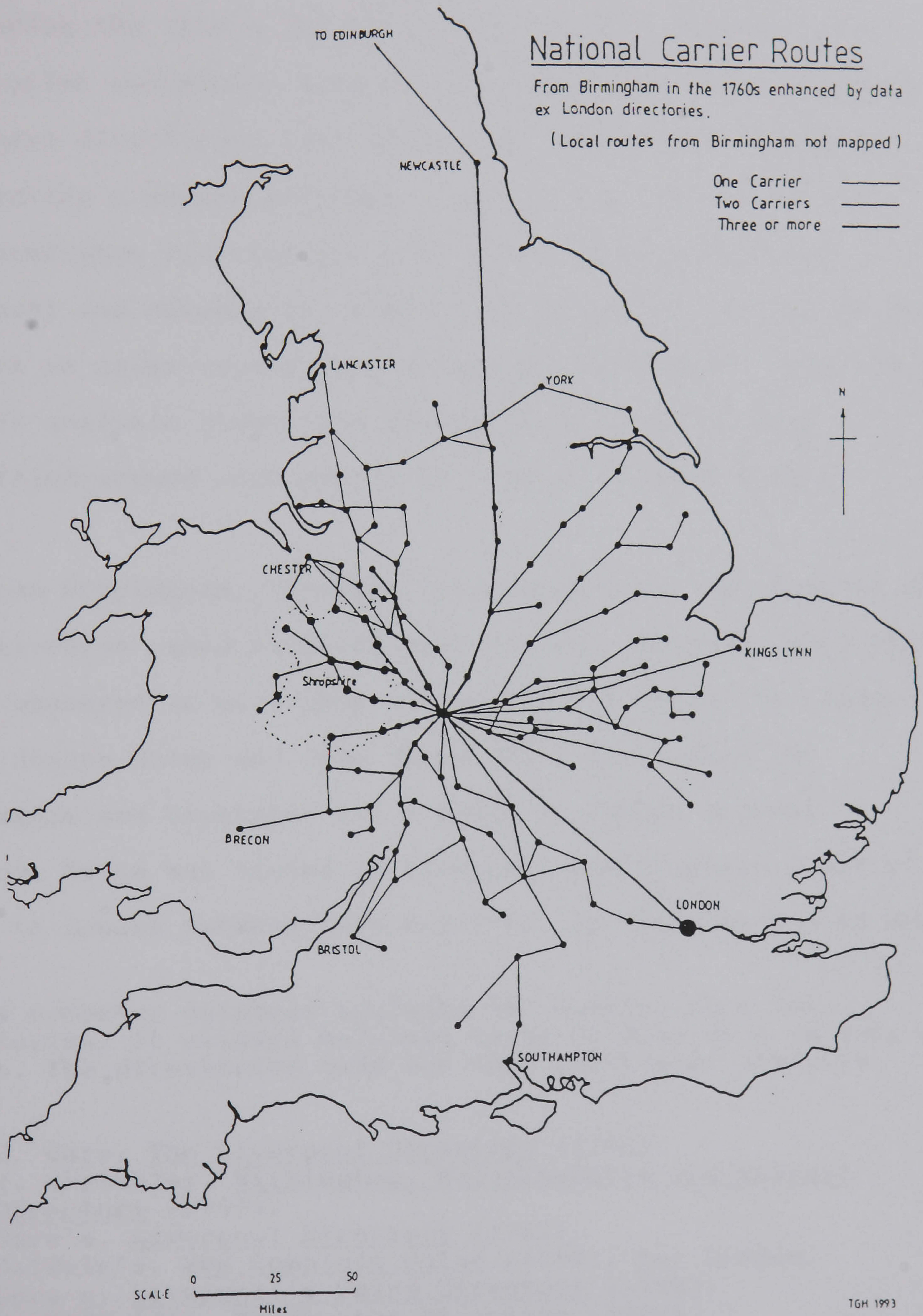


Figure 2.8





Figure 2.9





Welshpool, Montgomery and Newtown. This demonstrates the value of merging data from different directories even when the directory-towns were as far apart as London and Birmingham.

During the 1760's and 1770's, the number of provincial directories containing data on 'national' carriers increased and these directories also named many 'middling' carriers. By creating a merged database of data from one London and two Birmingham directories, with seven directories from Liverpool and Manchester, a more comprehensive picture of the network of cross-country routes was established.<sup>62</sup> The result of this analysis showed how the carriers served a wide hinterland around each provincial centre (Figure 2.10).

From Birmingham, Liverpool and Manchester, one hundred and seventy-three named carriers were listed. Of these only three names appeared in more than one provincial directory, James Hill, Joseph Hulse and John Twiss. Hill was listed in Birmingham and Liverpool for a route to London between 1766-69. Hulse was listed in Liverpool and Manchester for a route to London between 1766 and 1772. In 1766 the latter was

<sup>62</sup> The computer database included 888 entries from ten directories. It allowed multiple sorts of data on a variety of fields. The directories used for this particular analysis were:

J. Gore, The Liverpool Directory (1766).  
J. Sketchley, Birmingham, Wolverhampton and Walsall Directory (1767).  
Gore's, Liverpool Directory (1767).  
Baldwin's, New Complete Guide (1768), for London.  
Gore's, Liverpool's Third Directory (1769).  
E. Raffald's, Manchester Directory (1772).  
E. Raffald's, Manchester Directory (1773).  
Gore's, Liverpool's Fourth Directory (1773).  
Gore's, Liverpool's Fifth Directory (1774).  
M. Swinney, The New Birmingham Directory & Gentleman and Tradesman's Compleat Memorandum Book (1774).

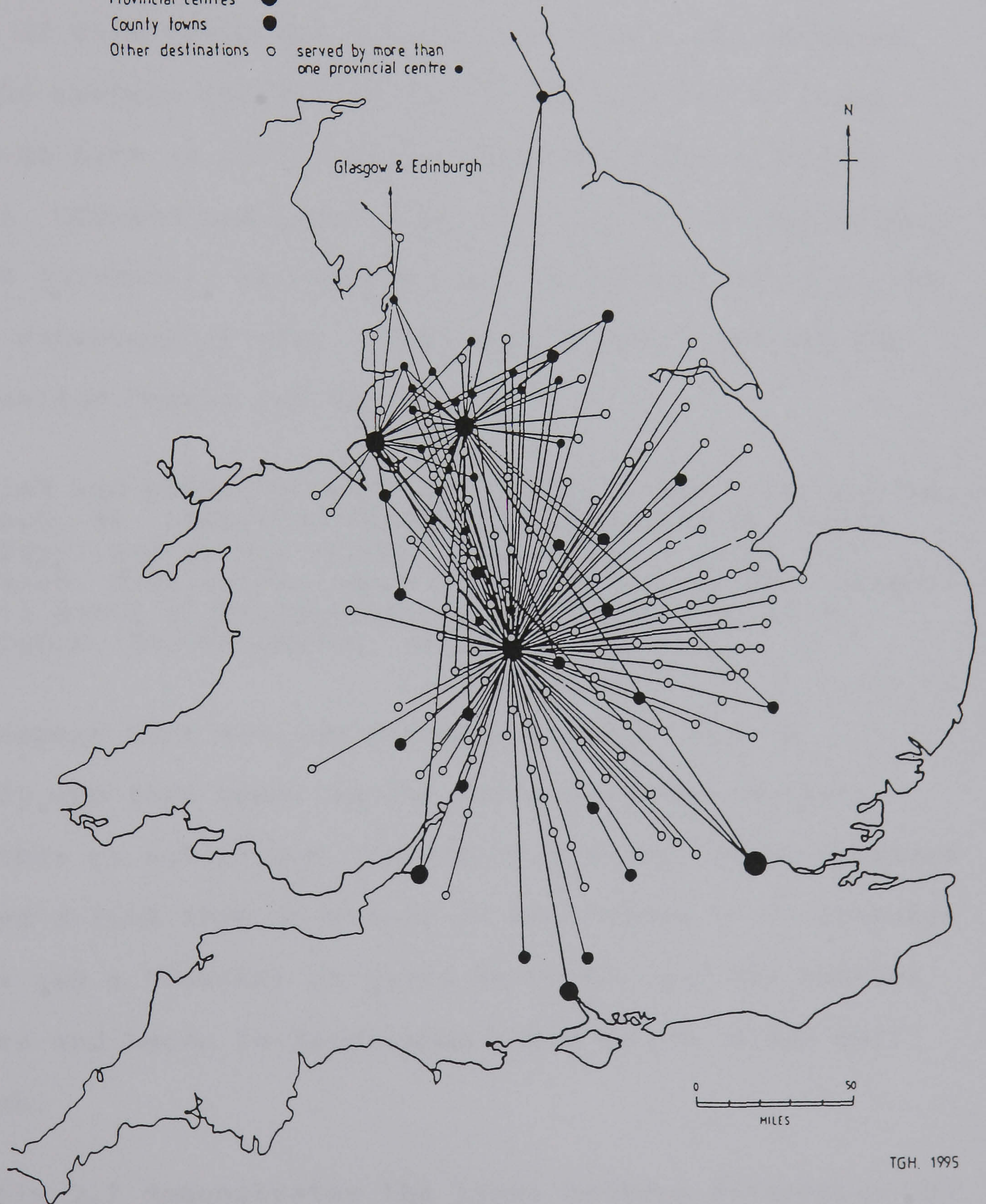


Figure 2.10

# CARRIER HINTERLANDS 1766 - 1774

Of Liverpool, Manchester and Birmingham

- Provincial centres ●
- County towns ●
- Other destinations ○ served by more than one provincial centre ●





shown as Thomas Hulse, and from 1767-1774 as Joseph Hulse; in 1772 the Manchester entry lists this carrier as Hulse & Co., and these varied entries have been regarded as the same carrier. John Twiss, who is also shown as T. Twiss, also appeared in the Manchester and Birmingham directories.

As Table 2.7 indicates there was an inconsistency in the names of Birmingham and Liverpool carriers who operated between the centres at similar dates. The carrier Hill was mentioned at both in 1767; but in the Birmingham directory two others, Gothard and Lacon were also listed as undertaking a route to Liverpool, but without any reciprocal entry in the Liverpool Directory of 1766. There were however entries for carriers called Morris and Taylor:

'WILLIAM and DANIEL MORRIS, and JAMES TAYLOR, come to the Woolpack, Mr. Warburton Barlow's in Dale-street, every Wednesday: and go out every Thursday, with goods for Northwich, Middlewich, Nampwich, Sandbach, Holme's Chapel, and all parts of Staffordshire; and forward Goods to Birmingham, Wolverhampton, and Lichfield.'<sup>63</sup>

It would appear that William and Daniel Morris were a partnership and that James Taylor was a separate carrier, although this is not proven. Therefore although these carriers represented a link from Liverpool to Birmingham it is probable that there was a transfer of goods en-route, and the entries for Gothard and Lacon in Birmingham could be the other half of the link.

As Table 2.7 demonstrates the links between Birmingham and Manchester appear to be consistent, even though the directories were for different dates. The links between

<sup>63</sup> Gore's, Liverpool Directory (1766), p. 36.



Table 2.7

COMPARISON OF CARRIER ENTRIES BETWEEN PROVINCIAL DIRECTORIES 1766-1774						
An analysis of the carrier names listed in Birmingham, Liverpool and Manchester and the centres they linked at particular dates.						
PROVINCIAL CENTRES	1766	1767	1769	1772	1773	1774
Birmingham to Liverpool		Gothard Hill Lacon				Twiss Bradbury
Liverpool to Birmingham	Hill Morris Taylor	Hill Morris Taylor	Hill Morris Taylor		Morris Taylor	Morris
Birmingham to Manchester		Gothard Twiss				Twiss
Manchester to Birmingham				Twiss	Twiss	
Manchester to Liverpool				Kemp	Kemp & Roberts Higson	
Liverpool to Manchester			Burrows		Burrows	Molding & Roberts

Table 2.8

NUMBER OF NAMED CARRIERS SERVING PROVINCIAL CENTRES 1766-1774			
Probable number by category.			
PROVINCIAL CENTRE	NATIONAL	MIDDLEING	LOCAL
Birmingham	41	57	4
Liverpool	9	13	0
Manchester	11	38	0



Liverpool and Manchester were slightly confused. Burrows never appeared in Manchester and Higson and Kemp never appeared in Liverpool. However, a carrier called Kemp & Roberts in Manchester in 1773 appears to become Molding and Roberts in Liverpool in 1774, and such entries may represent a partnership which was changing hands through time.

Of the traders listed, James Hill only appeared to ply between Liverpool and Birmingham, setting out from his own house in Liverpool once a fortnight. James Gothard also linked the two centres but was also listed as serving a number of towns en-route once a week. As the route followed by Thomas Lacon in 1767 was, with the exception of Wigan, exactly the same as that by William Bradbury in 1774, it is assumed therefore that this was a business that had changed hands and this particular route from Birmingham extended as far north as Lancaster. William Higson first appeared in 1772 with a route between Manchester and Chester to which was added a further route to Liverpool in 1773. Joseph Burrows apart from linking Liverpool and Manchester was also listed with extensive routes into Derbyshire and Yorkshire but the directory did not stipulate his exact destinations.<sup>64</sup>

In this period the carriers listed in the provincial directories were, as far as possible divided into the three

<sup>64</sup> By combining the directory entries used in Table 2.7 a more detailed picture of the routes followed by John Twiss, mentioned on page 82 above, can be calculated. During the period 1767 -1774 he was listed in the Birmingham or Manchester directories as serving thirty separate destinations. These stretched from Coventry in the east and covered towns within the counties of Staffordshire, Cheshire, Lancashire, and Yorkshire as well as Newcastle-upon-Tyne and Edinburgh.



categories: 'national', 'middling' and 'local'. For some this was a simple task as the destinations, like those for John Twiss, were clearly indicated. For other entries it proved to be difficult; for example in Birmingham in 1767 there is an entry for Blakeman and Allsop, which merely stated that their destination was 'Deeping Market'. Market Deeping, as it is called today, was a small market town in the Lincolnshire fens at a distance of sixty-eight miles (109 km.) from Birmingham. There was no reference to this carrier serving any other town en-route, in spite of the fact that this partnership must have passed close to Leicester, Oakham, Stamford and Peterborough. This destination raised questions, why was Market Deeping an important destination? why did the carrier not serve the larger town of Peterborough about 5 miles (8 km.) away? The answer to these queries is discussed on page 136 below.

Another difficulty encountered, was the tendency in the Liverpool directories to indicate some particular destinations for a carrier and then add a wider region, consisting of a number of counties. For example in 1773 the entry for Joseph Burrows reads: 'Joseph Burrows, comes to the Millstone and Castle, Mr. John Pendleton's in Dale Street, every Tuesday, Thursday and Saturday, and goes out the same days; carries all sorts of goods for Warrington, Manchester, Stockport, Macclesfield, Knutsford, and most parts of Derbyshire and Yorkshire; and puts up at the Talbot, in Sankey Street, Warrington, every Monday, Wednesday and Friday.'<sup>65</sup>

In instances such as this where counties were listed as destinations the carriers have been regarded as 'national'.

<sup>65</sup> Gore's, Liverpool's Fourth Directory (1773), p 95.



In a few cases villages were listed in the provincial directories as carrier's destinations. Of these, four carriers only served the villages en-route to another market town and were therefore categorized as 'middling'; for example T. Bentley a carrier from Birmingham to the towns of Warwick, Southam and Kingston was shown in 1774 as serving the villages of Solihull and Knowle.<sup>66</sup> Only four carriers were categorized as 'local' in this period, and they all operated from Birmingham to industrial villages in the nearby Black Country such as Bilston and Willenhall.

Of the 173 named carriers listed in this group of provincial directories, a reasonable assessment can be made of their categories. There were sixty-one 'national', one hundred and eight 'middling', and four 'local' carriers. It is considered that there were many other 'local' carriers operating in the areas surrounding these centres, but they were not mentioned in these early provincial directories.

It is made clear from Table 2.8 (p. 91), that the greatest number of carriers were listed for Birmingham, with a total of 102 names, of which forty-one were categorized as 'national'. This demonstrated that, by the period 1767-1774, Birmingham had become the hub of many routes which covered the country and this is clearly shown in Figure 2.10 (p. 89). This map shows how the carrier routes from the three provincial centres of Birmingham, Liverpool, and Manchester, were linked to Bristol and London, as well as demonstrating how other links had been established between these provincial centres and

<sup>66</sup> The spellings of Kineton varied in different directories, it appeared as Kington in 1767 and Kingston in 1774.



certain major towns. These included the county towns of Cambridge, Derby, Nottingham, Worcester, Shrewsbury and Chester as well as Coventry and the inland port of Bewdley on the river Severn. Many of these towns were on primary routes that served more than one provincial centre. One difficulty encountered was the need to clarify destinations with obscure or similar place-names.<sup>67</sup> However by comparing routes from different centres this problem was largely overcome.

The results achieved by combining various provincial directories demonstrated how considerable cross-country routes existed to the north, east and south-east of the Shropshire area. However, apart from routes which followed the Severn valley little evidence could be found concerning routes which linked the Shropshire area to the south-west of England.

#### Carrier routes in and around the Shropshire area in 1780-1789.

As the eighteenth century progressed so more provincial trade directories were being printed. To analyse the links

<sup>67</sup> For example there were five entries for a route from Birmingham to Brigg. Of these two can be clearly identified as to Brigg in Lincolnshire because of the other destinations listed for the particular carriers. However in 1767 a carrier called G. Oxford has a logical route running south from Birmingham to Wantage which also includes a destination called Brigg, but as there is no indication of a link between this route and north Lincolnshire this has been discounted as a typographical error. There are also two entries of Brigg as a destination served by Robert Spencer who in 1767 and 1774 is shown as a carrier to Bewdley. In these cases the place-name Brigg appears to be a mistranslation of Brugg the colloquial, and older name, for Bridgnorth in Shropshire and has been regarded as such. Another example was the place-name Newport. Between Birmingham and Chester is Newport, Shropshire, between Birmingham and London is Newport Pagnell. These anomalies were solved by combining data from a number of directories.



established by the towns of the Shropshire area in the period 1780 - 1789, the data from thirteen directories was combined.<sup>68</sup> To London-directory information was added data from the provincial towns of Birmingham, Bristol, Chester, Liverpool, Manchester and Shrewsbury.

The up-graded data from the period 1766-1774 was compared to the data from 1780-1789, (these two periods are hereafter referred to as the 1770's and 1780's). This comparison produced some valuable results. As Table 2.9 shows, there was an increase in the number of directories which were analysed between the two periods, from 9 to 14, a rise of 56%. There was also an increase in the number of provincial centres analysed, from 3 to 6, a rise of 50%. The number of entries however only rose from 884 to only 1023, or 16%. The uneven percentage rise is explained by the fact that the directories

<sup>68</sup> The computer database totalled 1,023 entries from the thirteen directories listed below:

Timmin's, Birmingham, Wolverhampton, Walsall, Dudley, Bilston and Willenhall Directory (1780).  
T. Lowndes, The London Directory (1780).  
Gore's, Liverpool Directory (1781).  
Pearson & Rollason, The Birmingham, Wolverhampton, Walsall, Dudley, Bilston and Willenhall Directory (1781).  
The Chester Guide (1781).  
The Chester Guide (1782).  
Bailey's, Western & Midland Directory (1783).  
The Bristol Directory (1785).  
Minshull's, Shrewsbury Visitor's Guide and Directory (1786).  
Bailey's, Liverpool Directory (1787).  
E. Holme, A Directory for Manchester and Salford (1788).  
T. Lowndes's, London Directory (1788).  
Cowdray's, Chester Guide (1789).

These directories proved to be a somewhat mixed group of sources. Some gave details of the carrier's names, days of the week, times of departure, etc; but others had limited entries such as 'The Shrewsbury Waggon' or 'The Welsh Carriers' or merely gave a destination as 'Yorkshire'. In these periods the London directories were extremely poor at giving carriers names.



Table 2.9

COMPARISON OF PROVINCIAL CARRIER DIRECTORY ENTRIES IN THE PERIOD 1766-1774 AND 1780-1789

Period	Total number of entries	Total number of destinations	Number of entries for named carriers	Number of destinations by category		Number of Provincial Centres analysed	Number of Trade Directories analysed
				National	Middling	Local	
1766-74	884	266	651	166	97	3	3 9
% of entries			73.6%	18.8%	11.0%	0.3%	Birmingham Liverpool Manchester
% of destinations				62.4%	36.5%	1.1%	
1780-1789	1023	369	618	190	145	34	6 14
% of entries			60.4%	18.6%	14.2%	3.3%	Birmingham Bristol Chester Liverpool Manchester Shrewsbury
% of destinations				51.5%	39.3%	9.2%	



for the provincial centres of Bristol, Chester and Shrewsbury contained limited data.

In spite of this inconsistency, a comparison of the numbers of carriers analysed, by the categories 'national', 'middling' and 'local', showed some interesting results. The percentage of 'national' carrier entries remained fairly consistent at 18% but although the overall number of destinations rose from 166 to 190 the percentage of destinations served by 'national' carriers fell from 62% to 52%. There is however a simple answer for this fall in percentage terms; the rise in the number of 'middling' and 'local' carriers affected the overall divisor.

The number of destinations served by 'middling' carriers rose from 97 to 145, and this rise was reflected in a percentage rise from 11% of the entries in the 1770's, to 14% in the 1780's. There was also a rise in the destinations served by 'middling' carriers from 36% in 1770's to 39% in the 1780's. A noticeable factor in the analysis of these two periods, was the rise in the number of 'local' carriers. The number of entries rose from 3 to 34, while the destinations served rose from 1% to 9%. This suggests that, as more Provincial Directories were published, there was also an increase in recording 'middling' and 'local' carrier services. From this period a clearer picture of the underlying local carrying services emerges. It is argued however that these underlying services had existed much earlier, although this is difficult to prove because of the paucity of data.



Although, in Table 2.9, the number of provincial centres rose between the two periods as was expected, and the number of destinations served by carriers only rose from 266 to 369 (39%). This can be partially explained by the fact that parts of the hinterlands of these provincial centres overlapped. For example carriers from Birmingham, Manchester, Liverpool and Chester all served destinations in Staffordshire and Shropshire.

The analysis of named carriers in the 1770's and 1780's.

It will be noted from Table 2.9 that the number of entries for named carriers fell between the periods from 651 to 618, but from Table 2.10 that the actual number of named carriers rose from 168 in the 1770's to 219 in the 1780's, a rise of 51%. The identification of carriers by name, enhances any analysis that is undertaken. Table 2.10 shows that the total number of named 'national' carriers fell from 56 in the 1770's, to 50 in the 1780's. This can be explained by the rise of dominant carrier firms, who may have gradually merged or 'taken over' smaller operators. By contrast, the number of 'middling' carriers rose from 108 to 140, but as a percentage of all named carriers they remained constant at 64%. It was the number of 'local' named carriers which rose significantly from 4 (2%) in the 1770's to 29 (13%) in the 1780's.

The figures contained in the right-hand section of Table 2.10, show how in these periods the Birmingham directories contained far more data than those for other provincial centres. Therefore the Birmingham figures are perhaps the best



Table 2.10

COMPARISON OF PROVINCIAL CARRIER DIRECTORY FOR NAMED ENTRIES IN THE PERIOD 1766-1774 AND 1780-1789

Period	Total number of entries with names	Total number of carriers named	Number of named carriers by category			Number of final destinations listed for named carriers at Provincial Centres				
			National	Middling	Local	B'ham	Liv'pool	Manc'ter	Chester	Bristol
1766-74	651	168	56	108	4	168	12	44		
% of named carriers			33.3%	64.3%	2.3%					
Named carriers per centre										
			National			44	15	11		
			Middling			54	8	38		
			Local			4				
1780-89	618	219	50	140	29	155	19	41	27	83
% of named carriers			22.8%	63.9%	13.2%					
Named carriers per centre										
			National			15	8	12	1	5
			Middling			24	9	34	35	36
			Local			5	0	1	15	16



example of how the recording of data was changing at this period.<sup>69</sup>

An analysis was undertaken of the named 'national' carriers in both periods whose destinations included major towns. As Table 2.11 shows, although the number of named carriers serving any one centre was limited, it is possible to demonstrate that a country-wide network, over and above any routes emanating from London, existed in the mid to late eighteenth century. This is clearly demonstrated by Figure 2.11, which shows how the provincial centres were linked together by major cross-country routes. Table 2.11 also demonstrates how Birmingham, which is within the area of this thesis, was the pivot around which a complex network of carrier routes had developed.

The results achieved above indicate how difficult it is to assess the growth of carrier services in the seventeenth and eighteenth centuries even when the analysis is undertaken using a computer database and splitting the categories into 'national', 'middling' and 'local'.<sup>70</sup>

<sup>69</sup> Between the 1770's and 1780's the destinations listed for 'national' carriers rose by one for Manchester, fell by seven for Liverpool but fell by twenty nine for Birmingham. 'middling' carriers for Manchester fell by four, Liverpool rose by one and Birmingham fell by thirty. For 'local' carriers only Birmingham can be compared with a rise of one. In Liverpool no local carriers are listed in either period and in Manchester one is listed in the 1780's only. It will be seen that it is the inclusion of the data from Chester and Bristol in the second period that effects the overall comparison.

<sup>70</sup> It is realized that care must be taken in the interpretation of the figures produced, for the division of carriers into the categories of 'national', 'middling' and 'local' is somewhat subjective. Other scholars could divide the entries in a different way and produce different results.



Table 2.11

NUMBERS OF NAMED CARRIERS SERVING PRINCIPLE TOWNS FROM PROVINCIAL CENTRES  
IN THE PERIOD 1766-74 AND 1780-89

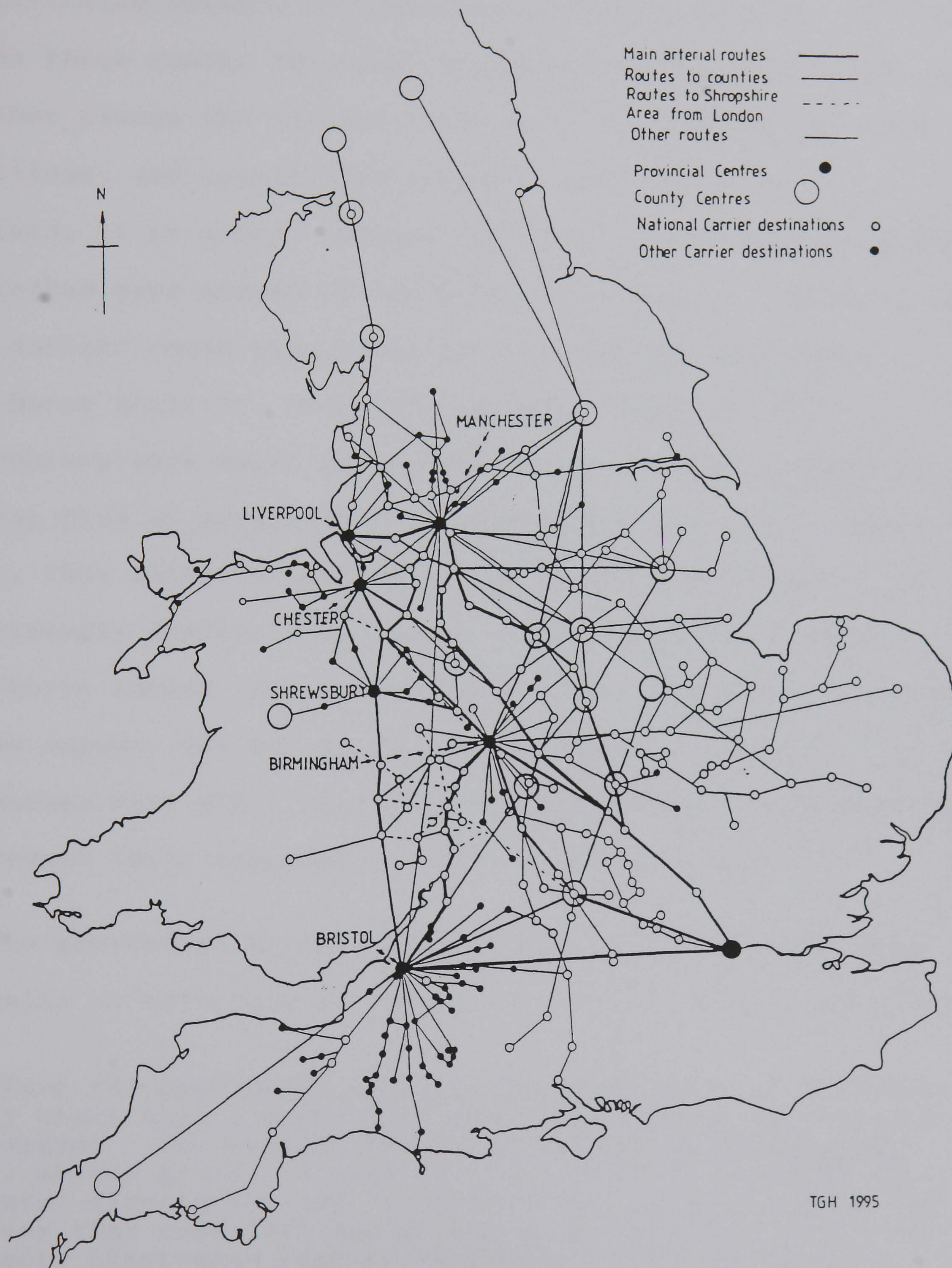
Town Served 1766 - 1774	PROVINCIAL CENTRES		
	BIRMINGHAM	LIVERPOOL	MANCHESTER
Bristol	3		1
Birmingham		1	1
Cambridge			1
Chester	2		
Edinburgh	3		
Exeter			
Lancaster	3		
Leeds	2	1	1
Leicester	1		
Lincoln	1		
Liverpool	5		
Manchester	2	2	
Newcastle U T	3		2
Northampton	2		
Nottingham	2		
Oxford	4		
Peterborough	1		
Plymouth			
Reading	2		
Salisbury	1		
Sheffield	2		1
Shrewsbury	2		
Southampton	2		
Winchester	4		
Worcester	4		
York	3		3

Town Served 1780 - 1789	PROVINCIAL CENTRES			
	BIRMINGHAM	BRISTOL	LIVERPOOL	MANCHESTER
Bristol	2			1
Birmingham		1	2	2
Cambridge	2			2
Chester	1		2	
Edinburgh	1		1	
Exeter	1	3		
Lancaster			1	
Leeds			1	
Leicester	1		1	3
Lincoln	1			1
Liverpool				1
Manchester			1	
Newcastle U T				2
Northampton	1			
Nottingham	1			
Oxford	2			
Peterborough	2			
Plymouth		3		
Reading	1			
Salisbury	1			
Sheffield	1		1	3
Shrewsbury	2		2	
Southampton	1			
Winchester	1			
Worcester	1	2		
York	1		2	



Figure 2.11

Carrier routes and networks from six Provincial Centres  
in the period 1780 - 1789





The use of carrier's waggons or pack-horse trains.

The analysis of London and provincial directories, has demonstrated that in the eighteenth-century there existed a sophisticated network of country-wide carrier routes. In some places these routes followed turnpiked and improved roads, but in other places the carriers must have faced difficult road conditions, and mountainous terrain. From the records examined, it is almost certain that most routes emanating from Birmingham were served by carriers using waggons, however, the term carrier could also refer to a person who operated a pack-horse train.<sup>71</sup> Certainly in more rugged terrain pack-horses were still in use and Hey referring to Farey's, General View of Agriculture of Derbyshire, III (1817) makes it clear, that this continued into the nineteenth-century: 'It is surprisingly difficult to obtain a clear picture of what a pack-horse looked like... Even John Farey, who had as good an eye as anyone, was merely content to observe (in 1817) that packhorses were still used in North Derbyshire, "each muzzled, to prevent their stopping to graze by the roadsides".'<sup>72</sup>

The provincial directories studied in this decades make virtually no reference to routes into Wales, only a few routes

<sup>71</sup> Before the nineteenth century, the provincial directories rarely state that a particular route was served specifically by a waggon. For example Sketchley's Birmingham Directory (1767) merely gives: 'A list of stage coaches, carriers etc.' and later directories say 'A correct list of the waggons and carriers that come into and go out of Birmingham.'. Even in the early nineteenth century Wrightson's New Triennial Directory of Birmingham (1818) says 'A list of the waggons, caravans etc' thus suggesting that pack-horses may have been termed 'caravans'.

<sup>72</sup> Hey, Packman, Carriers p. 86. Further evidence of the use of pack-horses in nineteenth-century Shropshire will be found in chapter 6 below.



are shown, from Chester along the northern coastline and from Hereford to Brecon (Figure 2.11). It has already been suggested that extensive droving routes emanating from Wales had crossed the Shropshire area since the middle ages. It is therefore conceivable that pack-horse routes from this area also penetrated into Wales.

A clue to the routes that pack-horses might have followed is found in earlier works such as, Ogilby and Morgan's Pocket-book of Roads, (1736).<sup>73</sup> Apart from listing the routes connecting the Shropshire area with London, it also indicated the existence of north-south routes which passed through Wales and the Welsh Marches. The lists of towns and villages contained in this source were so detailed, that it was possible to construct a map of the routes with a high degree of accuracy (Figure 2.12). On studying the list in conjunction with the 1" ordnance survey maps for Wales it became obvious that in some areas the routes followed valley bottoms, where roads may have been suitable for waggons. However, in other areas the routes crossed high mountain passes, which could only be negotiated by pack-horses.

Another record of the existence of direct and cross roads which served Wales can be found in a map dated 1675 which was included in Addison's book: The Old Roads of England (see Figure 2.13).<sup>74</sup> Colyer in his book: Roads and Trackways of

<sup>73</sup> W. Morgan, Ogilby's and Morgan's Pocket Book of Roads, 8th edn. (1736). This was bound together with W. Meadow's London directory, called The Intelligencer or Merchants Assistant (1738).

<sup>74</sup> Sir W. Addison, The Old Roads of England (1980), p. 94. The original source of this map is not stated.



Figure 2.12

ROUTEWAYS PASSING THROUGH THE  
SHROPSHIRE AREA AND WALES 1736

Based upon Ogilby & Morgan's Pocket Book of Roads





Figure 2.13



THE POST-ROADS OF ENGLAND, 1675.

— DIRECT ROADS  
--- CROSS ROADS

Map 13 The Post-roads of England (1675)

From - The Old Roads of England,  
Sir William Addison, London, (1980)  
page 94.



Wales, considered the development of routes in Wales since the Roman period, and in particular undertook a study of the pre-turnpike roads of Radnorshire. By reference to Ogilby's Britannia (1676), early maps of Wales, and observation of trackways in the landscape Colyer was able to build a picture of a network of roads, which he shows as a series of maps. From his research he stated that the turnpiking of main routes in Wales had begun by the mid eighteenth-century and gradually routes suitable for wheeled traffic were developed.<sup>75</sup>

In 1693, G.M. listed sixty-nine market centres in the counties of Wales and Monmouth.<sup>76</sup> Chartres listed one-hundred and seventy two fair-sites in the Principality in 1756.<sup>77</sup> Whilst the Welsh fair-sites were primarily the place where cattle and sheep were bought for droving to England, fairs were also places for an exchange of goods. Throughout the eighteenth century, woollen fabrics were also an important export from Wales, and the income generated from such sources would have been spent in Welsh market towns. Apart from their function as a place of exchange for locally produced goods and services, the Welsh market towns were also places where demand for goods from England and further afield were met. In his

<sup>75</sup> R. Colyer, Roads and Trackways of Wales (1984), p. 83. Sections of Colyer's listed routes can be compared to the routes described in Ogilby and Morgan's Pocket-book of Roads, discussed above. By comparison of Colyer's maps with one-inch ordnance survey maps, it is clear that the terrain covered by some of these roads was more suited to pack-horses and droving than wheeled traffic.

<sup>76</sup> G. M., The New State of England (1693), pp. 204-228.

<sup>77</sup> Chartres, Agricultural Markets, pp. 179-180.



book on nineteenth-century Wales, Howell makes the point, that before the railway network was built in the nineteenth century communications in the principality were difficult, he comments how coastal shipping was important in the marketing of Welsh produce and that it also transported goods from distant suppliers. After commenting upon the types of agricultural output, he says: 'Other important conditions of trade were the absence of large local markets for consumer goods and the imperfect communications linking rural Wales with external markets in the years before the railways were built. This meant that coastal shipping played an important role in the marketing of Welsh agricultural produce, particularly in the shipment of produce to Bristol.' (see chapter four below)<sup>78</sup>

It is clear therefore, that in spite of the paucity of data from English trade directories about road carrier routes into Wales, some must have existed. It also clear that some supplies to Welsh towns were carried by road carriers, who may have operated pack-horse trains, and who linked their routes to points of contact with coastal shipping.

#### The eighteenth century road-transport network - Conclusions.

From the evidence uncovered in this chapter on eighteenth-century road-carriers, it has become clear that the Shropshire area was linked to the rest of Britain by a complex network of pack-horse, droving and waggon routes. Secondly, that this network had its beginnings in the seventeenth century, if not in the middle ages, and lastly that carriers,

<sup>78</sup> D. W. Howell, Land and People in Nineteenth-Century Wales (1977), p. 112.



who initially may have used pack-horses, transferred to waggons on the improved turn-pike roads.

Apart from driving, the evidence for the development of road-carrying routes has been culled primarily from Trade Directories which were initially published in London. These were followed, from the 1760's by an increasing number of provincial directories, and in the last decade of the eighteenth century by the first truly national directory: Barfoot and Wilkes' Universal British Directory. It has been shown, that new insights into the carrying trade can be achieved by abandoning the traditional categories used by earlier scholars, such as London carriers or local carriers, and replacing them with categories based upon the spatial area which the carriers served, namely: 'national' 'middling' and 'local'. It is argued, that assumptions made about the scale of growth in road carrying routes may not be as secure as was once thought. For, by analysis using these three categories, it is suggested that the apparent growth in carrying services was overstated, what was being observed was not necessarily the number of services but actually a growth in the recording of information about carrying services.

This chapter has also shown from various ancillary sources, such as badger's licences and probate inventories, that there is evidence that localized systems of transport were in existence long before they were recorded in trade directories. It has also indicated the existence of 'middling' carriers who linked together market towns. This was clearly suggested as early as 1637 when Taylor, commented



upon the limitations of his seminal work, The Carrier's

Cosmography:

'Others may object and say that I have not named all the townes and places that Carriers doe goe unto in England and Wales: To whom I yeeld, but yet I answer, that if a carrier of Yorke hath a letter or goods to deliver to any towne in his way thither, he serves the turne well enough, and there are carriers and messengers from Yorke to carry such goods and letters as are to be past any wais north, broad and wide as farre or further than Barwicke: so he that sends to Lancaster, may from thence have what he sends conveyd to Kendall, or Cockermouth, and what a man sends to Hereford may from thence be passed to St Davids in Wales, the Worster carriers can convey any thing as farre as Carmarthan, and those that goe to Chester may send to Carnarvan: ...'79

In spite of Taylor's last comment, it is not until the emergence of directories in the 1780's that scholars can begin to identify carrier routes into Wales, and even then the information is limited. Overall this chapter has highlighted some of the difficulties of using early trade directories as a source, and thus supports Gerhold's comment:

'Directory lists of carriers are an extremely treacherous source.'<sup>80</sup>

79 Taylor, Carriers Cosmography, pp. 4-5.

80 Gerhold, 'The growth of the London carrying trade, p. 393.



## CHAPTER 3

### THE DEVELOPMENT OF THE RIVER AND CANAL NETWORK

The Shropshire area is situated in an area of the country now called 'The West Midlands' or the 'Heart of the Country', an inland region of Britain far from the sea. There were however two major rivers which served this heart-land, the Trent flowing to the east and the Severn flowing to south (Figure 3.1). Since the Roman period both of these rivers have been used as vital water-way links to the outside world. For example Uriconium, the third largest Roman civitas in Britain was developed at the junction of the major road 'Watling Street' and the river Severn.<sup>1</sup> The Trent was used by the Romans to link this inland area to the sea on the east coast, and they also built a canal, 'The Fossdyke' to make a waterway link between Lincoln and the Trent at Torksey.<sup>2</sup>

#### The early development of trade on the river Trent.

From the middle ages, the town of Gainsborough was a river port on the Trent used by coastal vessels, as Beckwith records:

'In 1298 the bailiffs received a grant for quayage for three years, to build a quay against the inundations of the Trent and Gainsborough was named in 1322 as one of the ports to supply the king with corn, and in 1323 the keeper of the port was among Port Keepers ordered to prevent John de Stratford leaving the country... The decay of Torksey

<sup>1</sup> Haines also comments upon the Dee as important Roman route-way for minerals from Shropshire, but it appears to have declined as a routeway in later periods. W. Haines, 'Forgotton highways: the Romans and water transport in western Britain,' West Midlands Archaeology, No. 36, (1993), pp. 19-27.

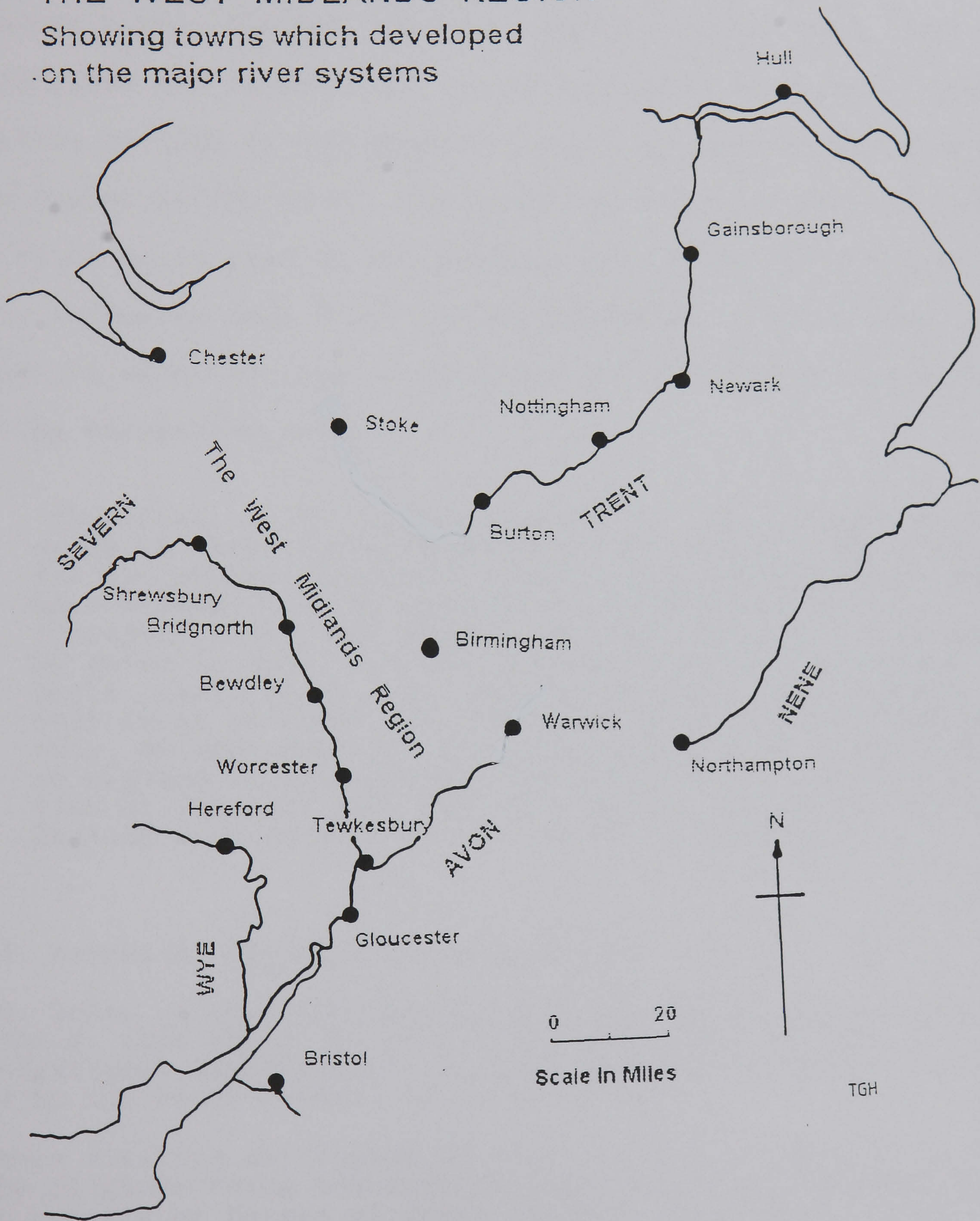
<sup>2</sup> This canal was restored in 1121 and improved in 1782 and 1840 thus indicating how a valuable waterway-route for the transport of goods between regions continued to be used. E. S. Wood, Collins Field Guide to Archaeology in Britain (1963, 1975 edn.), p. 193.



Figure 3.1

# THE WEST MIDLANDS REGION

Showing towns which developed  
on the major river systems





in the 15th century helped Gainsborough's growth as an inland port. When John Leland visited Torksey in the mid-16th century he heard that ships which had once gone to Torksey now went to Gainsborough.'<sup>3</sup>

The commercial importance of the Trent was commented upon by Defoe who says: 'The Trent runs a course of near two hundred miles, through the four counties of Stafford, Derby, Nottingham and Lincoln; it... is navigable by ships of good burthen as high as Gainsborough, which is near 40 miles from the Humber by the river. The barges without the help of locks or stops go as high as Nottingham, and farther by the help of art, to Burton upon Trent in Staffordshire.'<sup>4</sup> Defoe then comments upon the type of goods being transported from parts of the Shropshire area:

'The Trent... is a great support to, and increase of the trade of those counties which border upon it; especially for the cheese trade from Cheshire and Warwickshire, which have otherwise no navigation but from Westchester (Chester) to London; whereas by this river it is brought by water to Hull, and from thence to all the south and north coasts on the east side of Britain. 'Tis calculated that there is about four thousand ton of Cheshire cheese only, brought down the Trent every year from those parts of England to Gainsborough and Hull; and especially in time of the late war, when the seas on the other side of England were dangerous to bring it by long-sea.'<sup>5</sup>

<sup>3</sup> I. Beckwith. The Book of Gainsborough (1988), p. 95.

<sup>4</sup> D. Defoe, A Tour through the Whole Island of Great Britain (1724-6, 1986 edn.), p. 450. Defoe then discussed the navigational improvements, from Wilne Ferry to Burton in 1699, and by the river Derwent to Derby in 1719.

<sup>5</sup> When visiting Nottingham he adds further information on the type of goods being transported: 'The Trent is navigable here for vessels or barges of great burthen, by which all their heavy and bulky goods are brought from the Humber, and even from Hull; such as iron, block-tin, salt, hops, grocery, dyers' wares, wine, oil, tar, hemp, flax &c. and the same vessels carry down lead, coal, wood, corn; as also cheese in great quantities, from Warwickshire and Staffordshire. Defoe, A Tour through the Whole Island, pp. 450-451, and p. 454.



An insight into how the traffic along the Trent developed is further demonstrated by Beckwith in his study of Gainsborough. Of coastal shipping he says: 'of 98 ships cleared outwards through Hull customs from Stockwith and Gainsborough in the period between 26 June 1704 and 22 June 1705, 82 were bound for London... the rest were bound for Lynn, Yarmouth, Chatham, Newcastle and Sunderland.' of the river trade he says: 'The 18th century saw the growth of the great brewing firms of Burton-on-Trent, exporting ale to Russia and the Baltic. The casks of ale were taken by local carriers by barge downriver to Gainsborough, where they were transhipped into brigs and carried downriver to Hull.' He comments further on the growth of the export trade 'By the 19th century however, foreign trade began to figure more. In 1834 about 60,000 of the annual 158,000 tons were imports of foreign goods and British goods for export. Sailings to and from European ports began to appear in such papers as the Stamford Mercury.'<sup>6</sup> The return traffic was also an important feature on the Trent especially goods from London destined for inland towns. Beckwith quotes from the cargo list of 'The Henrietta' of Gainsborough homeward bound from London on 28th February 1705 which included: 'Madeira and port wine, tobacco, soap, oil, paper, hops, vinegar, earthenware, dressed sheepskins, oilman's wares, lead seals, white wine. Canary brandy, spirits, lead shot, saltery, haberdashery, ironmongers' ware, blue linen, currants, sugar, grocery, flour and cider.'<sup>7</sup>

<sup>6</sup> Beckwith, The Book of Gainsborough, p. 96.

<sup>7</sup> Beckwith, The Book of Gainsborough, p. 97.



The early development of trade on the river Severn.

On his tour of the west and Wales, Defoe travelled up the Severn from Gloucester which he says is: 'a fine river, but narrower as you go northward, 'til a little before we come to Gloucester it ceases to be navigable by ships of burthen, but continues to be so, by large barges, above a hundred miles farther;'.<sup>8</sup> Celia Fiennes, who had little to say about the river Trent, gives a fuller picture of the river trade at Gloucester, saying: 'here is a very large Key on the river; they are supply'd with coales by the ships and barges which makes it plentiful, they carry it on sledgs thro' the town, its the great Warwickshire coale I saw unloading; here they follow knitting, stockings, gloves, waistcoates and peticoates and sleeves all of cotten, and others spin the cottens.'<sup>9</sup>

At Tewkesbury Defoe commented upon the Severn trade which followed the navigable Warwickshire Avon: 'For by this river they drive a very great trade for sugar, oil, wine, tobacco, iron, lead, and in a word all heavy goods which are carried by water almost as far as Warwick; and in return the corn and especially the cheese, is brought back from Gloucestershire and Warwickshire to Bristol.'<sup>10</sup>

On reaching Worcester, Defoe adding further details about the manufacture of particular areas comments: 'There are three or four especial manufactures carried on in this country, which are peculiar to itself, or at least to this

<sup>8</sup> Defoe, A Tour through the Whole Island, p. 365.

<sup>9</sup> C. Morris (ed.), The Journeys of Celia Fiennes (1947), p. 234.

<sup>10</sup> Defoe, A Tour through the Whole Island, p. 367.



county with the two next adjoining: namely Chester and Warwick'. He then lists the specializations that were developed at certain towns:

1. Monmouth caps sold chiefly to Dutch seamen, and made only at Bewdley.
2. Fine stone pots for the glass-makers melting their metal of which they make their fine flint glass, glass plates, &c. not to be found any where but at Stourbridge in this county, the same clay makes crucibles and other melting pots.
3. The Birmingham iron works; the north indeed claims a share or part of this trade, but it is only a part.
4. Kidderminster stuffs called lindsey woolseys, they are very rarely made any where else.<sup>11</sup>

At Worcester, Fiennes made a brief comment upon the Severn river traffic when she says: 'From Worcester we pass'd a large stone bridge over the Severn on which were many barges that were tow'd up by the strength of men 6 or 8 at a tyme.'<sup>12</sup>

Defoe adds further evidence of trade specialization in the Shropshire/Herefordshire border country which he says was famous for the fine wool, hops and cider and he comments upon the transport of cider to distant markets: 'great quantities of this cider are sent to London, even by land carriage, though so very remote, which is evidence of the goodness of it, beyond contradiction.'<sup>13</sup> Of waterway links to Hereford he comments that: 'it drives a considerable trade with the city of Bristol, by the navigation of the Wye.'<sup>14</sup>

<sup>11</sup> Defoe, A Tour through the Whole Island, p. 370.

<sup>12</sup> Morris, The Journeys of Celia, p. 232.

<sup>13</sup> Defoe, A Tour through the Whole Island, p. 373.

<sup>14</sup> Defoe, A Tour through the Whole Island, p. 375.



From their journeys at the beginning of the eighteenth century, Defoe and Fiennes clearly indicate that areas of specialization in production and manufacture was a factor of the west midlands, which included the Shropshire area. Further they show how these specialized areas were connected to a wider market by transport systems on the navigable rivers, the Trent, Severn, Warwickshire Avon and Wye.

### Links between road and river carriers and coastal shipping.

The diarists of the early eighteenth century describe in some detail river transportation and suggest how to some extent it was supported by road transport. As chapter two has shown, an extensive network of road services was in existence by the seventeenth century. The connection between road, waterway, and coastal shipping systems was posited by Willan, when he undertook an analysis of the latter in 1938. His introduction says:

'The system of transport by which the different parts of England communicated with one another in the seventeenth and early eighteenth centuries consisted of two often connected branches. There was transport by land and there was transport by water. The latter had two aspects, for goods could be carried either by navigable rivers or by sea. Just as there was a close interconnection between land and water transport, so there was a close interconnection between river navigation and the coasting trade.'<sup>15</sup>

This interconnection of transport systems is reflected in the London directories which frequently list the destinations of coastal ships and river barges operating from the city. This feature of London directories can be traced back to 1637

<sup>15</sup> T. S. Willan, The English Coasting Trade: 1600-1750, (1938), p. xi.



when on the cover of John Taylor's Carriers Cosmography (Plate 3.1) it says: 'As also Where the Ships, Hoighs, Barkes, Tiltboats, barges and wherries, do usually attend to Carry Passengers, and Goods to the coast Townes of England, Scotland, Ireland, or the Netherlands; and where the barges and Boats are ordinarily to bee had that goe up the River of Thames westward from London.'<sup>16</sup>

In 1976, Willan further developed the theme of transportation with a study of inland trade, but at that time limited research had been undertaken into road transport, hence his comment: 'Very little is known about roads and land transport, and very little may ever be known'.<sup>17</sup> He does however indicate that there was, in the sixteenth century, a growing need for information on road networks, and he comments upon the development of printed road tables which began to appear from 1541. His research did indicate that before the eighteenth century river routes were being utilized which had to be fed by overland routes; and both subsequent, and current research, into road transport systems is now adding to his original work.

On the subject of river transportation and the need for land transport systems Willan wrote:

'Cloth might go by river, as the Norwich cloth that was sent down the Yare to Great Yarmouth; or it might go by sea, as Carmarthan and Milford sent frieze to Bristol. Or there might be a combination of land and river transport on land and sea. In June 1570 two Manchester clothiers, Miles Wilson and Roger Saule, sent northern kerseys and Manchester cottons to Bewdley, obviously by land, for shipment down the Severn to Bristol.'<sup>18</sup>

<sup>16</sup> J. Taylor, The Carriers Cosmography (1637)

<sup>17</sup> T. S. Willan, The Inland Trade (1976), p. 2.

<sup>18</sup> Willan, The Inland Trade, p. 9.



Plate 3.1

THE  
Carriers Cosmographie.

or  
A Briefe Relation,  
of

The Innes, Ordinaries, Hosteries,  
and other lodgings in, and neere London, where  
the Carriers, Waggon, Foote posts and  
Higglers, doe usually come, from any parts,  
to woe, shires and countries, of the Kingdomes  
of England, Principality of Wales, as also from  
the Kingdomes of Scotland and  
Ireland.

With nomination of what daies of  
the weeke they doe come to London, and on  
what daies they returne, whereby all sorts of  
people may finde direction how to recieve,  
or send goods or letters, and such things  
as their occasions may require.

As also

Where the Ships, Hoighs, Barkes,  
Thibots, Barges and wherries, do usually attend  
to Carry Passengers, and Goods to the coast  
Townes of England, Scotland, Ireland, or the  
Netherlands; and where the Barges and  
Boats are ordinarily to be had  
that goe up the River of  
Thames upward  
from London.

By John Taylor.

London Printed by A. G. 1637.



It has been stated above that the Severn has since at least Roman times provided a major transport link between the Shropshire area and Bristol, the south west, and by sea to London and beyond. Writers on river transport have often regarded the Severn as a fickle river, subject to periods of flood or drought when it became un-navigable but, as is shown by Wakelin in his research using the Gloucester Port Books, whilst there were some delays overall this not a problem in the seventeenth and early eighteenth centuries.<sup>19</sup>

The research using the Gloucester Port Books gives vital information on the wide range of goods being carried up and down the Severn. For example Wanklyn refers to two journeys as follows:

'Outward (from Gloucester) for Bristol on 14 July 1691. The John of Shrewsbury, John Farley merchant and master, carrying 200 crates of earthenware, 13 packs of Manchester wares, 4 hogsheads and 2 barrels of salt, 3 packs of linen cloth, 2 trusses of serge, 7 tons of cheese and 36 bundles of calfskins.'

'Inward (from Bristol) on 31 January 1689. The Samuel of Shrewsbury, Samuel Gough merchant and master, carrying 3 tons of shot and lead weights, 2 packs of teazles, 15 ends, 1 pack and 2 trusses of serge, linen, woollen and mercery wares. i basket of pewter, 3 baskets of Spanish wine, 4 tons of grocery, and 30 hogsheads, 1 barrel and 8 bags of tobacco weighing 12,637 lbs. Per coquet.'<sup>20</sup>

<sup>19</sup> A. P. Wakelin, 'Pre-industrial trade on the River Severn; a computer-aided study of the Gloucester Port Books, c 1640 - c 1770', unpub. PhD thesis Wolverhampton Polytechnic, (1991).

<sup>20</sup> M. D. G. Wanklyn, 'The Severn navigation in the seventeenth century: long distance trade of Shrewsbury boats' Midland History, vol. XIII (1988) p. 37. He further explains that the term 'Manchester Wares' was used in the port-books for mixed fabrics from the Manchester region. Wakelin also comments upon the difficulties experienced in unraveling the diversity of terms used to describe cargoes and how some 12,000 different commodity strings was reduced to 3,000 terms of which at least 2,500 were genuinely different commodities. A similar need for combining terminology is explored in chapter 6 below.



This research has shown that goods carried on the river were more diverse than had been expected. Carriage was not merely confined to raw materials such as coal, salt and limestone and heavy goods such as pig and bar-iron, although industrial materials in both directions were of considerable importance. Further the research adds weight to comments such as that by Weatherill, that the north-Staffordshire coalfield was an important industrial area before the advent of Josiah Wedgewood.<sup>21</sup>

Wakelin's study of the 'home ports' has demonstrated the importance of Shrewsbury, Bridgnorth and Bewdley as major river ports on the upper Severn in the seventeenth century. Further that the trade through Gloucester from ports in the upper reaches of the Severn appears to wane in the eighteenth century.<sup>22</sup> He acknowledges however, that due to changes in recording by customs officers the later Port Books may not be giving the full picture.

In her study of Bewdley, Richards has shown that the period 1660-1770 was 'a time of great growth for the port of Bewdley'.<sup>23</sup> However with the opening of the canal and river port of Stourport in 1771 Bewdley, like Shrewsbury and Bridgnorth lost some of their traditional trade.

<sup>21</sup> Wanklyn, 'The Severn navigation' p. 48; L. Weatherill, The Pottery Trades of North Staffordshire (1971) pp. xv-xviii.

<sup>22</sup> Wakelin, 'Pre-industrial trade on the River Severn' p. 104.

<sup>23</sup> M. Richards, 'The rise of Bewdley as a river port 1660-1770', unpub. M.A. dissertation, University of Wolverhampton, Department of West Midlands Historical Studies, (1993).



Apart from the importance of the river trade for Shrewsbury, Bridgnorth and Bewdley, Trinder has argued that the provision of river transport was a major factor in the development of industry in the Coalbrookdale area.<sup>24</sup> His comments are supported by another study using the Gloucester Port Books by Cox and Wakelin.<sup>25</sup> This study shows a considerable rise in shipments of pig-iron and cast-ware from Coalbrookdale in the period 1709-25. However the lack of statistical data relating to the volume of trade in the upper Severn in the mid-eighteenth century compels the researcher to rely on more subjective reports. For example Trinder says:

'George Perry listed the numbers of vessels plying between Welshpool and Gloucester in 1756. Writing two years later he remarked that since his survey was taken the total had increased from 376 to 400. Over the next half century some staple traffics were diverted from the river to other forms of transport.'<sup>26</sup>

Other writers indicate that the ports in the upper reaches of the Severn were serving an important hinterland before the opening of the canal port to Stourport in 1771. For example Jackman quoted Richard Whitworth who wrote in 1760:

'There are three pot wagons go from Newcastle and Burslem weekly, through Eccleshall and Newport to Bridgnorth and carry about 8 tons of potware every week at £3 per ton. The same waggons load back with ten tons of close goods,

<sup>24</sup> Trinder, The Industrial Revolution, p. 61.

<sup>25</sup> N. Cox, 'Imagination and innovation of an industrial pioneer: the first Abraham Darby', Industrial Archaeology Review, XII, 2 (1990) with an appendix by Cox and Wakelin, pp 127-144.

<sup>26</sup> B. Trinder, The Industrial Revolution in Shropshire (1981), p. 61.



consisting of white clay, grocery and iron at the same price, delivered on their road to Newcastle. Large quantities of potware are conveyed on horses backs from Burslem and Newcastle to Bridgnorth and Bewdley for exportation, about one hundred tons yearly at £2-10s per ton.'<sup>27</sup>

To the north-west of the Shropshire area the major town of Chester was a port on the river Dee and provided a waterway link between the Shropshire area and the sea. There was however a problem with this outlet, the Dee tidal estuary was subject to heavy silting. Priestley comments upon numerous acts of parliament between 1700 and 1791 to improve the channel between Chester and the sea.<sup>28</sup> Upstream from Chester the Dee was never improved enough to become a major routeway. Edwards suggests that in earlier periods it may have been navigable for shallow draught boats, for in 1962 he comments:

'It is possible to pass Chester Weir on an ordinary spring tide with boats drawing more than 3 ft. of water, and craft can proceed 10 miles upstream to Almere Ferry... In certain conditions boats drawing 3 ft.. can get as far as Farndon Bridge, which is about 12 miles above Chester. Very light craft drawing only 1 ft. can reach Bangor-on-Dee.'<sup>29</sup>

Although the Dee did not become a major inland routeway, Chester continued to function as a port for coastal traffic as will be indicated in chapter four below. Apart from the improved river Weaver (1732-1810), it was not until the opening of the Chester (1779) and Ellesmere (1793) canals that Chester's hinterland was served by a viable waterway.

<sup>27</sup> W. T. Jackman, The Development of Transportation in Modern England (1916), p. 307.

<sup>28</sup> J. Priestley, Historical Account of the Navigable Rivers, Canals and Railways throughout Great Britain (1831, 1967 edn.), pp. 205-207.

<sup>29</sup> L. A. Edwards, Inland Waterways of Great Britain and Ireland (1962), pp. 94-95.



Improvements to rivers and the development of canals.

From the seventeenth century as technology improved and share capital became a feature of the economy, many problems associated with river transportation were solved by dredging, creating cuts and removing obstacles. Using the tables of dates in the Canals of the British Isles series, edited by Hadfield, a database was built up which created a picture of the river improvements which were made in the seventeenth and eighteenth centuries.<sup>30</sup> For example in the Fenland areas of Cambridgeshire and Lincolnshire the land-drainage schemes altered the course of rivers such as the Nene and the Great Ouse, and created what were in effect seventeenth century canals. These changes created a new transport network which allowed barge traffic to penetrate deep into the east Midlands, giving inland areas a link with coastal shipping at Spalding, Wisbech and King's Lynn on the Wash. In about 1670 the Welland was improved as far as the town of Stamford, and by 1761 Northampton was connected to Wisbech by the Nene.

In 1689 the Great Ouse was made navigable to Bedford, and by 1702 the Cam allowed access to Cambridge. From about 1677

<sup>30</sup> C. Hadfield, The Canals of the East Midlands (1970); C. Hadfield, The Canals of the West Midlands (1969); C. Hadfield, The Canals of Yorkshire and North-east England (1972); C. Hadfield, The Canals of South and South-east England (1969); C. Hadfield, The Canals of South-Wales and the Borders (1967); C. Hadfield and G. Biddle, The Canals of North-west England (1970); J. Boyes and R. Russell, The Canals of Eastern England (1977); J. Lindsay, The Trent and Mersey Canal (1979). These books would normally be considered as secondary sources, however the appendices they contain give detailed information of each river improvement and canal construction, the date of its act and opening, its authorized terminal points and when certain canal sections were built. In a study of the development of a transport network they can be regarded as primary sources when cross referred to maps.



the Little Ouse formed a link to Thetford, and by 1720 the Lark had been improved to link Bury St. Edmunds with the Great Ouse. In the areas of agricultural improvement of Norfolk and Suffolk, rivers were made navigable or canalized to link market towns and corn milling areas to ports on the Wash and from thence by coastal shipping to London.

Along the coast of East Anglia other rivers were made navigable; the Yare which linked Norwich to the sea at Yarmouth had always been a routeway, and in 1623 the Colne was improved, linking Colchester to the sea. By about 1709, the improved canalised Stour connected Sudbury with the coastal traffic at Mistley Quay on the tidal estuary. Barges were used to take grain and flour down river and return with goods from London, and chalk from the North Downs to use as fertilizer on the fields. It was in this area in the late 1700's that the farmer, miller and merchant Golding Constable not only owned wind and water mills but also coal yards, corn warehouses, barges and at least one coastal vessel, a corn brig called The Telegraph. Golding Constable was also a commissioner of 'The River Stour Navigation' and his enterprises became subjects for the sketches of his son, the artist John Constable (Plate 3.2).<sup>31</sup>

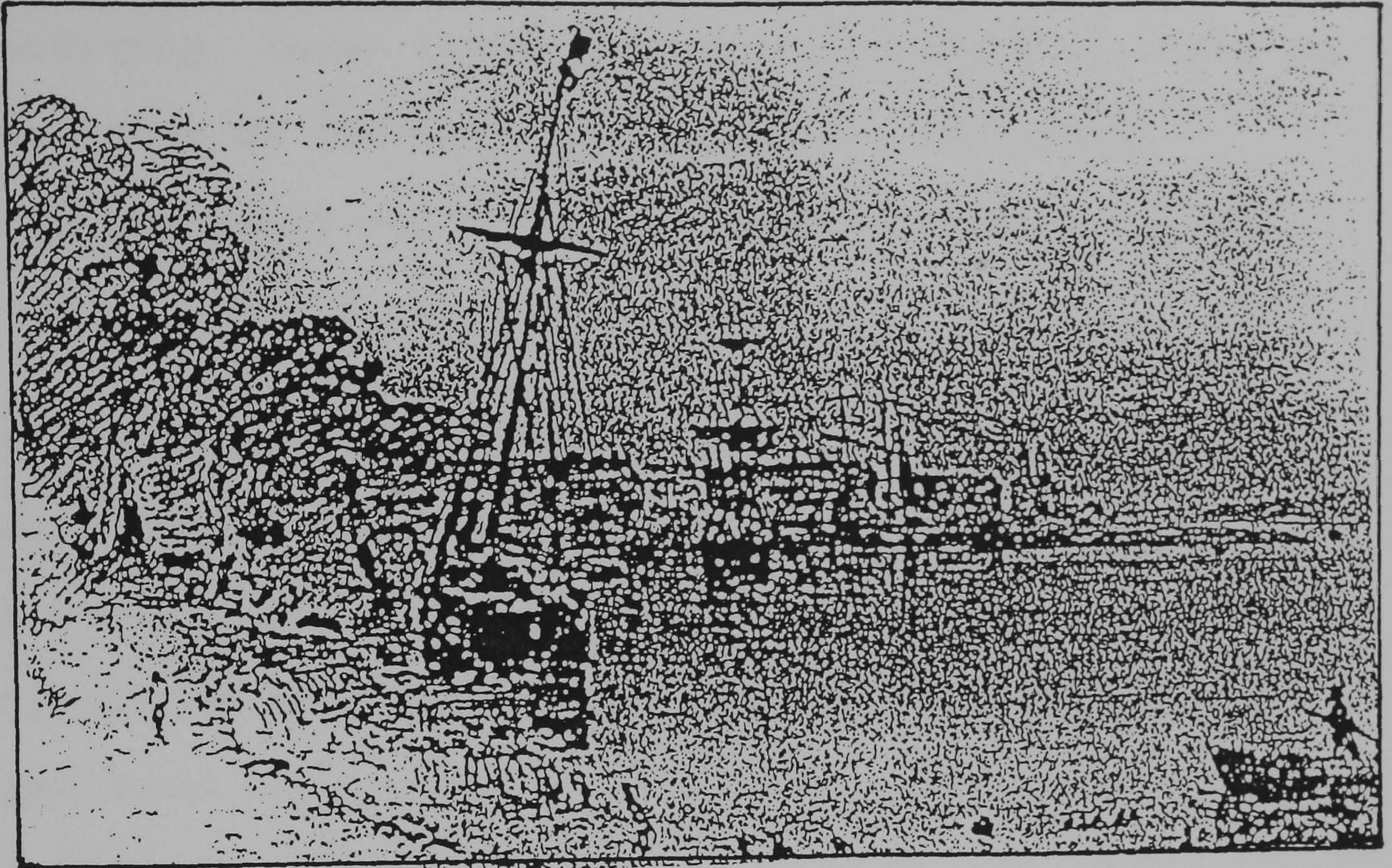
In the north of England, the Humber also provided an outlet to the sea for a number of major river systems. The Yorkshire Ouse had always been navigable to York, and 1769 it was improved to Swale Nab and in 1772 extended to Ripon by the Ure and Ripon canal. From 1751 the Don was navigable

<sup>31</sup> M. Rosenthal, Constable - The Painter and his Landscape (1983); R. Gadney, Constable and his world (1976)

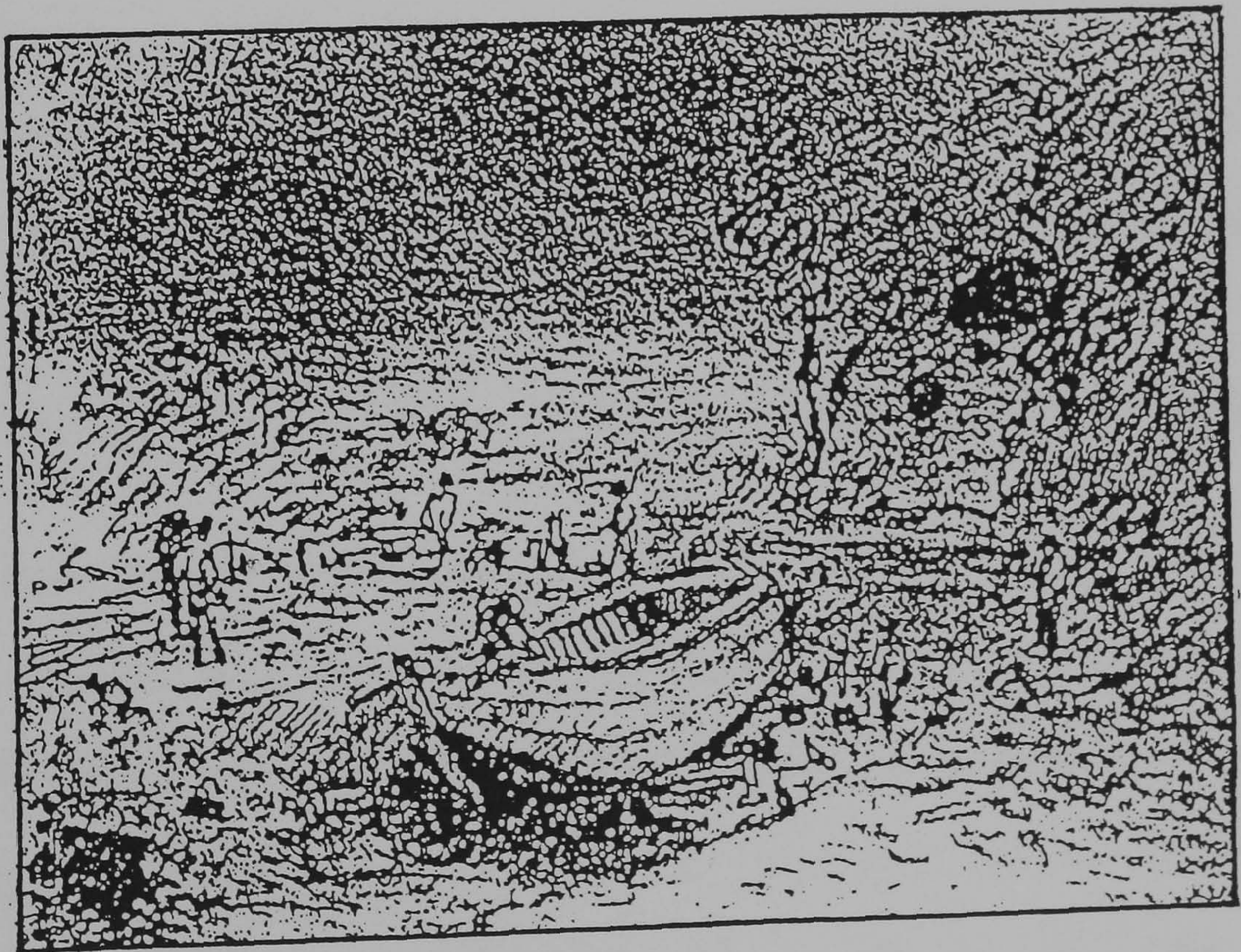


Plate 3.2

SKETCHES BY JOHN CONSTABLE (1776-1837)



Mistley 1817 Pencil Inscr. Augt 20. 1817  
Victoria and Albert Museum (R.181).



Study for Boat Building 1814 Oil on Canvas from 1814  
Sketchbook p 57, Pencil Insc Sepr 7 1814 Wednesday.  
Victoria and Albert Museum (R.132).

Copied from Michael Rosenthal,  
Constable - The Painter and his Landscape. (Yale 1983)



to Doncaster and by improvements almost reached Rotherham. Two other improved river systems were the Aire and Calder, and the Calder and Hebble, which were made navigable in 1704 and 1770 respectively. These river systems created vital links to many of the towns of the West Riding which were being developed as the major woollen-goods producing area in the country.

Beckwith comments upon improvements to the river Trent between Gainsborough and Nottingham, in the period 1783 to 1794 which were undertaken by William Jessop. This improvement created a depth of four feet which, nearly 200 hundred years earlier, had been recognized as the depth necessary for the passage of Wollaton coal lighters.<sup>32</sup>

Apart from the river improvements, canals were added to the developing waterway network in the eighteenth century, the first being the Sankey-Brook Canal in Lancashire in 1757. This canal was built primarily to carry coal to local works and it was not until the opening of the Bridgewater Canal in 1765 that canals began to link the coal fields to major centres of population via river systems and coastal transport.

The first major canal connecting two river systems was the Trent and Mersey Canal which opened in 1777. Its connection with the river Mersey at Preston Brook became a focus for road carrier routes from Cheshire and the surrounding area. This canal connected to the Trent at Wilden ferry which was the junction of the rivers Trent and Derwent. The Trent and Mersey Canal was 94 miles long and at Burton-on-Trent the canal and navigable river ran alongside each other. This canal also

<sup>32</sup> Beckwith, The Book of Gainsborough, p. 95



connected to the earlier Staffordshire and Worcestershire canal which had been opened in 1772. Its course ran from just east of Stafford southwards through Wolverhampton and Kidderminster to a newly constructed river port on the river Severn named Stourport. Therefore by 1777 a canal network linked the major river systems of Mersey, Trent and Severn.

To this basic network other canals were quickly added to link Birmingham and the growing industrial area of the Black Country into the system. The Birmingham Canal opened in 1772, was extended in 1789 and was linked to the Wyrley and Essington Canal in 1792. The latter was extended in 1794 to form a link to the Coventry Canal (opened 1790) which ran from Fradley Junction, on the Trent and Mersey Canal, to Coventry. In 1790, with the opening of the Oxford Canal, the Midland waterways system was linked to the Thames at Oxford.

The River Thames was navigable as far as Inglesham, a mile west of Lechlade on the Gloucestershire/Wiltshire border. Further west, in Gloucestershire, the town of Stroud was an important woollen-producing centre. The eight-mile (13 km.) stretch of the Stroudwater Canal was built in 1779 to link this town and its industrial base, to the River Severn. In 1789 the Stroudwater was extended another twenty-nine miles by the Thames and Severn Canal creating the first inland waterway link between London and the west country. The waterway route between London and Bristol was further improved in 1810 by the opening of the Kennet and Avon Canal. Therefore by the 1790's the major rivers, Severn, Mersey, Trent, and Thames were linked together by canals, and Birmingham, which was already a hub of road-carrying services, now became the hub of a canal



network which covered much of England. By the end of the eighteenth century the enthusiasm for canal building had reached fever pitch and has become known as the canal-mania period.<sup>33</sup> It was in this period that another link was proposed between the Mersey and the Severn and which would serve and help to develop the coalfields and lime quarries on the Shropshire-Welsh border and in particular serve the Ruabon coalfield. The result of this proposal was the development of the Ellesmere Canal and in 1793 an act of parliament was sought (for a detailed discussion on this canal see the section below on the development of canals in Shropshire).

#### Waterways and roads: A structure for an industrial revolution.

The construction of canals has been associated by economic historians with the phrase 'The Industrial Revolution', for example, Ashton wrote of the period 1760-1830:

'Areas that for centuries had been cultivated as open fields, or had lain untended as common pasture, were hedged or fenced; hamlets grew into populous towns; chimney stacks rose to dwarf the ancient spires. Highroads were made straighter, stronger, and wider than those evil communications that had corrupted the good manners of travellers in the days of Defoe. The North and Irish Seas, and the navigable reaches of the Mersey, Ouse, Trent. Severn, Thames, Forth and Clyde were joined together by threads of still water. In the North the first iron rails were laid down for the new locomotives, and steam packets began to ply on the estuaries and the narrow seas.'<sup>34</sup>

The conditions which brought about an apparent 'Industrial Revolution' have been discussed at length. Ashton, in his

<sup>33</sup> For a full list of the improved rivers, canals opened, the towns they served, and the opening dates refer to details from the database used for this analysis (appendix 3).

<sup>34</sup> T. S. Ashton, The Industrial Revolution: 1760-1830 (1949, 1980 edn.), p. 1.



book, lists as chapter headings; 'Technical Innovations', 'Capital and Labour', 'Individualism and Laissez-faire', and Hartwell included in his book The Industrial Revolution and Economic Growth a chapter entitled 'The heavy variables: Capital, Population, Technology, and Organization'.<sup>35</sup> Transport systems tend to receive only passing reference, and road transport was virtually ignored.

As early as 1776 Adam Smith had recognized the value of efficient transport systems. He commented upon the cheapness of water-borne transport over that of land carriage, but looked for improvements to both, seeing the need for an integrated network. He commented on the improvements: 'Good roads, canals, and navigable rivers, by diminishing the expense of carriage, put remote parts of the country more nearly upon a level with those in the neighbourhood of the town. They are upon that account the greatest of all improvements.'<sup>36</sup> Mathias also recognized the importance of transport in the industrialization process when he wrote:

'Industrialization could proceed only with the development of investment and innovation in transport keeping pace with investment and innovation in production. The size of the market - a vital condition for industrial growth - according to the degree that goods are bulky relative to their value, becomes a function of transport costs. The cheaper transport costs become the larger the area over which such cheap and bulky goods can be marketed.'<sup>37</sup>

Mathias was an economic historian who favoured the end of the eighteenth century as the date for the 'Industrial

<sup>35</sup> R. M. Hartwell, The Industrial Revolution and Economic Growth (1971).

<sup>36</sup> A. Smith, The Wealth of Nations (1776, 1986 edn.), p. 251.

<sup>37</sup> P. Mathias, The First Industrial Nation (1969, 1983 edn.), p. 97



Revolution'. He saw the 1740's and 1780's as a gestation period after which economic growth 'took off'. He commented how a lack of a good transport had given protection to certain industries, but how when that protection factor dissolved:

'Cheaper transport cracked them open. Economic gain and social hardships resulted from this, as from so many other aspects of economic change. New specializations were forced upon the invaded high-cost production areas or, at worst, migration of people if the level of locally available employment fell. In the industrial areas favoured with special advantage in production costs, localization and concentration of industry intensified as their markets widened and production expanded.'<sup>38</sup>

Like many contemporaries, Mathias was still doubtful about road conditions and road transport, and saw water-borne transport, as a major factor in bringing down transport costs. Not surprisingly he sees the development of waterways as an important part of this growth process:

'But the greatest effect of improved transport proved a creative one. Resources hitherto completely sterilized by their location away from water carriage or away from a market were mobilized for production. Again this was particularly important for the cheap bulky materials - stone, brick, ores, timber - coal above all - exactly the materials needing to be deployed in vast quantities during industrialization.'<sup>39</sup>

For Mathias improved transport systems were a key factor in economic growth, and a trigger which supported his arguments for the timing of the 'Industrial Revolution'.

Much has been written about 'The Industrial Revolution', as scholars have debated when and how it may have emerged. But as Flinn says:

'... the conception of the Industrial Revolution has, not surprisingly, undergone some astonishing metamorphoses. At

<sup>38</sup> Mathias, The First Industrial, p. 97.

<sup>39</sup> Mathias, The First Industrial pp. 97-98.



one time it has, with cataclysmic suddenness, transformed the economy overnight from feudal backwardness to the machine age: at another, it has been tamed to a movement of gradual evolution to which the very description 'revolution' appears utterly inappropriate. It has been pushed, chronologically, from pillar to post to such an extent that every fresh writer on the subject must define and defend his own choice of dates... Though the proponents of these rival approaches have been stimulated by the belief that their predecessors were mistaken in their emphasis their varied interpretations are, of course, complementary rather than mutually exclusive. The Industrial Revolution was not a particular kind of economic or social change; it was all kinds.<sup>40</sup>

The zenith of the canal-mania occurred in 1793, and a map of the navigable river and canal systems demonstrates how, by that date, a basic network had emerged linking areas of specialist production (Figure 3.2). These areas were, the East-Anglian grain producing areas, the pastoral-production areas of north Shropshire and Cheshire, the textile areas of the West Riding and Manchester area, the iron and steel areas of the Shropshire coalfield, Birmingham and Sheffield, the pottery industry of Stoke, and glass production in Stourbridge as well as various coalfields located in Lancashire, North Wales and the Midlands. Against the arguments put forward by Mathias, it can be postulated that some of these areas had been developing as specialist areas of production since the seventeenth century and that road-transport networks had allowed a wider distribution of goods than has previously been envisaged. In this thesis it has already been suggested that the import of goods from other areas and from overseas, was a feature of the distribution system which could supply the

<sup>40</sup> M. W. Flinn, The Origins of the Industrial Revolution (1966), p. 2.



Figure 3.2

## NAVIGABLE RIVERS and CANALS - 1793

Based upon data extracted from the 'Canals of the British Isles'

series. Ed. Charles Hadfield

Navigable rivers — Canals open by 1793 - - -





needs of small town retailers, such as those in Shifnal (see page 44 above).

Scholars, like those mentioned above, who embraced the concept of an 'Industrial Revolution' have tended to place the event in the latter half of the eighteenth century, and as they have largely discounted road transport, they have tied it to the emergence of the canals. From the analysis in chapter two it was shown that a wide network of road transport served most towns in Britain. Further, by analysis of the waterways' database (Table 3.1), it becomes clear that many towns had been connected to a navigable waterway network since at least the 1500's. Table 3.1 shows that while 62% of the total number of improvements were undertaken in the period from 1750-1799, in fact 49% of riverside towns were already on a waterway systems which were navigable.

**Table 3.1**  
Number of navigable waterways developed and towns served from the 16th to the 18th centuries.

Period	Number of Waterways improved or opened		Number of Towns served or junctions created.	
Pre 1500's	9	9%	32	17%
1500's	2	2%	3	2%
1600's	12	12%	31	16%
1700-1749	14	14%	26	14%
1750-1799	60	62%	97	51%

In this table some towns are counted more than once because additional connections were made by new systems.

However scholars arguments for a later period, and for the importance of canals are justified for some industrial areas such as Birmingham and the Black Country. In 1772 the Birmingham Canal was opened and linked to the Staffordshire



and Worcestershire Canal at Autherley junction in Wolverhampton. This canal created a route from Birmingham to the river Severn and also to the Trent and Mersey Canal. A more direct link to the north was made in 1789 by linking the Birmingham and Fazeley Canal with the Coventry Canal and thus to the Trent and Mersey Canal at Fradley Junction.

With the opening of the Oxford Canal in 1790 Birmingham achieved its first waterway route, via the Coventry Canal, to London. It was not until 1805, with the opening of the Grand Junction Canal (later than the period of the database used in this chapter), that a more direct canal route was established between London and Birmingham, and it was not until 1815, with the opening of the Worcester and Birmingham Canal, that Birmingham had a more direct link with the River Severn.

#### Road and waterway connexions from the 1760's to the 1780's.

The question was raised earlier, why was Market Deeping a destination for Birmingham road carriers? (page 93 above). The significance of this small town was, its location on the river Welland, and that it had been a port for coastal shipping since 1670. Market Deeping therefore served Birmingham as an east-coast port in the same way that Bewdley and Bridgnorth on the Severn served Birmingham for river and coastal traffic to Bristol, south Wales and south-west England.

As stated on page 129 above, Birmingham had become the hub of major transport networks. Its significance was as a nodal point for transport links, not only to other inland towns, but



also to river ports, some of which, like Market Deeping, were also ports for coastal shipping. To analyse the linkages between road and waterway transport systems the databases covering both forms of transport were merged.

A comparison between two periods was undertaken, 1766-1774 referred to as the 1770's and 1780-1789 as the 1780's (Tables 3.2 and 3.3). The details for Birmingham show that the number of carriers serving coastal destinations fell from nine in the 1770's to four in the 1780's a fall of 56% between the two periods. However as new waterways were developed, so the number of carriers serving river or canal-port destinations rose from, fourteen in the 1770's to fifty-two in the 1780's, a rise of 271% in these periods.

An analysis of the numbers of destinations listed for Birmingham road carriers showed that the number of coastal destinations fell from seven in the 1770's to four in the 1780's a fall of 2%. For river and canal destinations there was a small rise from forty-six (32%) in the 1770's to forty-nine (41%) in the 1780's. The inland destinations listed fell from ninety (64%) in the 1770's to sixty-seven (56%) in the 1780's. Although between the two periods the total number of coastal and river or canal ports remained constant at fifty-three there is a percentage rise from 37% in the 1770's to 44% in the 1780's. The fall of inland centres from ninety in 1770's to sixty-seven in 1780's may be due to the way the directories were compiled, and this could therefore affect the percentage figures. However, it could be an indication that



TABLE 3.2

ANALYSIS OF DESTINATIONS OF NAMED NATIONAL CARRIERS FROM PROVINCIAL CENTRES IN THE PERIOD 1766-1774

Period 1766-74	Number of carriers to specific types of destination				Number of destinations			
	Total listed	To London	To coast	To river /canal	To inland	Coastal	River/ canal	Inland centres
Birmingham	44	26	9	14	27	77	46	90
		34%	12%	18%	36%	5%	32%	64%
Liverpool	11	3	0	1	2	0	2	2
		50%		17%	33%		50%	50%
Manchester	15	5	2	2	2	1	6	7
		46%	18%	18%	18%	7%	43%	58%



TABLE 3.3

ANALYSIS OF DESTINATIONS OF NAMED NATIONAL CARRIERS FROM PROVINCIAL CENTRES IN THE PERIOD 1780-1789

Period 1780-89	Number of carriers to specific types of destination				Number of Destinations			
	Total listed	To London	To coast /canal	To river /canal	To inland	Coastal	River/ canal	Inland centres
Birmingham	14	6 4%	4 3%	52 39%	73 54%	4 3%	49 41%	67 56%
Bristol	5	2 11%	2 11%	11 58%	4 21%	2 13%	9 60%	4 27%
Liverpool	7	3 25%	1 8%	4 33%	4 33%	1 11%	3 33%	5 56%
Manchester	10	2 20%	2 20%	4 40%	2 20%	1 17%	3 50%	2 33%

N.B. The provincial centres of Chester and Shrewsbury listed no National carriers by name.



the 'national' carriers were concentrating upon inland waterway destinations. It is considered that, as rivers were improved and canals built, the need for road carriers to carry goods to coastal ports declined and an integrated service of road and inland waterway carrying was being developed.

Although the figures for other provincial centres are limited, it is interesting to note that one of the carriers from Manchester, George and Jonathan Worthington, only listed destinations which were river ports. In 1772 Jonathan Worthington served Bristol once a week, but by 1773 he served Bristol twice a week and his route also called at Bewdley and Worcester on the River Severn. It is not stated whether the goods for Bristol and Worcester were shipped from Bewdley by barges or trows, but this would appear likely. George Worthington operated an easterly carrier route from Manchester once a week in 1773. This route served Leeds on the Aire & Calder navigation which had been operational since 1704. He also ran a waggon to York on the River Ouse, a river which had been improved in 1769. It is not clear however whether the goods for York were transhipped to local barges for the route down the Aire and Calder navigation to the Humber and then up the Ouse to York. It is probable that the Worthingtons undertook waterway as well as road carrying. When discussing the rise of canal carriers in Manchester, Turnbull mentions the name Worthington when writing about the company of Hugh Henshall, he says:

'In the early 1790's it controlled most of the traffic passing off the canal on to the river Trent and employed as many as seventy-five barges, then one of the largest



barge fleets on the canals. However there was competition. In 1782 a new firm of canal carriers, Worthington and Gilbert, began a rival service to the Midlands.<sup>41</sup>

As Jonathan Worthington was shown as serving Birmingham, Bewdley and Bristol, it would appear that he is the same Worthington who was involved in the canal trade with a partner called Gilbert.

Another Manchester road-carrier listed was Matthew Pickford, and the company of Pickfords and Co. which developed later certainly operated both road and canal services. Turnbull in his detailed study of this firm's records stated:

'Pickfords was the first fully private company to enter the canal trade in Manchester. Its move followed the revival of construction by the Coventry and Oxford Canal Companies in 1785, promising the completion of a canal route from Lancashire to London by way of the Thames at Oxford. The final sections, to Oxford in the south and Fazeley in the north were finished in 1790. By then some traffic was already passing part of the way between London and Manchester. A London directory for 1783 included among the carrying services to Manchester 'carriage to the canals and thence in barges' from the Saracens head, Snowhill. The name of the carrier was not recorded. Perhaps it was Henshall & Co., since it is known that the firm was operating just such a service three years later... Pickfords entered the canal carrying trade by acquiring this portion of Henshall's business.'<sup>42</sup>

The above analysis has emphasized the importance of Birmingham as the hub of a complex system of transport. This

<sup>41</sup> Hugh Henshall and Co., were a company set up by the directors of the Trent and Mersey Canal, G. L. Turnbull, Traffic and Transport, An Economic History of Pickfords (1979), p. 79; In the Manchester Directory (1788), Henshall and Co. were listed among the carriers operating from Castle Quay and serving Birmingham, Gainsborough, Stourport, Derby, Leicester, Loughborough, Burton, Lichfield, Wolverhampton and Stafford.

<sup>42</sup> Turnbull's final conclusion was based upon Osborne, The Complete Guide (1783) and the Manchester Mercury (19 Dec. 1786). Turnbull, Traffic and Transport, p. 79.



began with road-carrier routes which connected it to both inland and coastal ports and then developed as the hub of a canal network.

The growing importance of Birmingham as a nodal point for transport systems is illustrated by comparing the figures for 1767 with 1783 (Table 3.4).

TABLE 3.4

Comparison of carrier destinations from Birmingham for the specific years 1767 & 1783

Type of Destination	1767		1783	
	Number	%	Number	%
Inland	87	60%	76	55%
Coastal	8	5%	5	4%
River	49	34%	46	34%
Canal	2	1%	10	7%
Total	146	100	137	100

In 1767 some 146 destinations were listed which were served by twenty-six 'national' carriers, twenty-nine 'middling' carriers and two 'local' carriers. In 1783 some 137 destinations were served by twelve 'national' carriers, twenty 'middling' carriers and no 'local' carriers. While the overall numbers for these two specific years fell there was a slight but significant rise in the percentage of river and canal destinations rising from 35% to 41%. If however the figures for the coastal destinations are combined with the canal and river destinations then only a modest increase of 40% to 45% is achieved.

This study of waterway destinations from Birmingham was further analysed by considering the routes followed by the



principal 'national' carriers to the regional areas of the North-east, East, South, South-west and North-west, and the number of journeys made per week (Table 3.5). This shows that apart from one example, J. Twiss, the carriers in all these areas had changed between the two dates. It also demonstrates, that in all but one case (J Twiss, travelling to the north-west), the amount of traffic to five regions increased to an almost daily service by 1783. In Figures 3.3 and 3.4 the inland and waterway destinations of these carriers were mapped and it is clear that many of their routes were to towns or villages on navigational rivers or canals.

In 1767 only two canal destinations were listed, Chatteris (Cambs.) and Ramsey (Hunt.), both located on the Fenland drainage channel called the Forty Foot river, but by 1783 the number of canal destinations had increased to ten. In the eastern region, Whittlesey (Cambs.) on the King's Dyke, was added as a Fenland destination. Also listed were Burton-on-Trent and Newark which were on the river Trent and, by this date, on the Trent and Mersey Canal (opened 1777). In the north-eastern region Retford and Chesterfield were on the Chesterfield canal (1771), and Louth was on the Louth canal (1770). In the south west Stroud, which was now connected to the River Severn by the Stroudwater canal (1779), was shown as a destination. Stourbridge was linked to the Severn by the Stourbridge canal (1779) and Wolverhampton was on the Staffordshire and Worcestershire canal which linked the Severn to the Trent & Mersey Canal.

The 'national' and 'middling' carriers that served Birmingham had in this period established services to its



Table 3.5

A COMPARISON OF CERTAIN NATIONAL CARRIER ROUTES FROM BIRMINGHAM IN THE YEARS 1767 AND 1783.

Showing the area served in relationship to Birmingham, the number of Inland, Waterway and coastal destination and the number of journeys recorded per week.

Year	Carriers Name	Area Served	Number of Destinations			Journeys per week
			Inland	Waterway	Coastal	
1767	W Weston	north east	5	17	4	2
1783	Swaine & Anderson		5	11	2	7
1767	Joseph Bayley	east	5	11	0	1
1783	James Burrows		8	10	0	6
	John Alexander		10	12	2	1
1767	W Webster	south	9	6	1	1
1783	Richard Franklin		7	4	1	1
	William Judd		15	3	6	5
1767	J Moore	south west	9	8	0	4
1783	John Ashmore		7	9	0	6
1767	J Twiss	north west	13	2	1	1
1783	J Twiss		1	0	0	1

Summary

Year	Total number of carriers	Type of Destinations		
		Inland	Waterway	Coastal
1767	Total Carriers 5	41 (45%)	44 (48%)	6 (7%)
1783	Total Carriers 7	53 (49%)	50 (47%)	4 (4%)



Figure 3.3

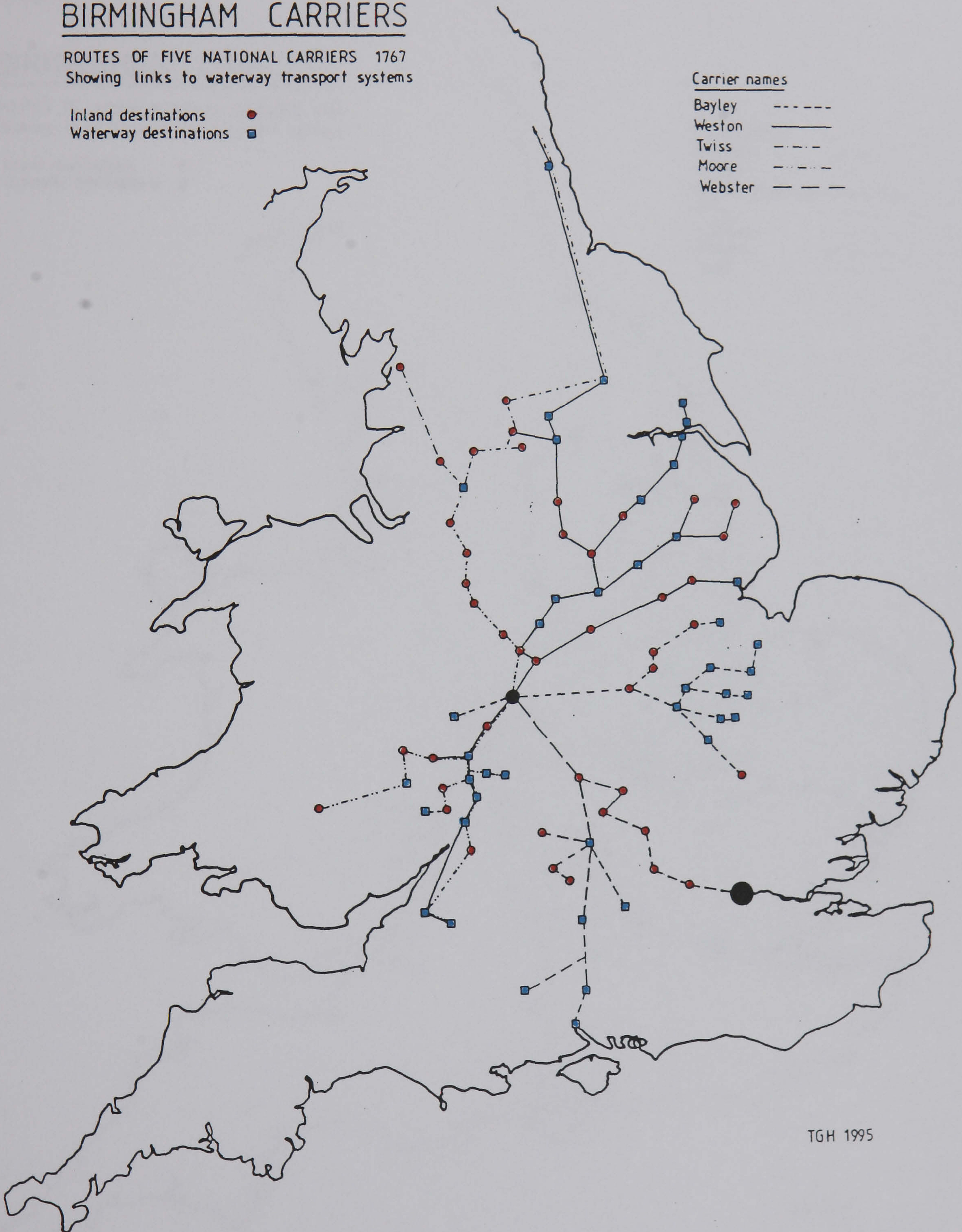
## BIRMINGHAM CARRIERS

ROUTES OF FIVE NATIONAL CARRIERS 1767  
Showing links to waterway transport systems

Inland destinations    ●  
Waterway destinations    ■

### Carrier names

Bayley	-----
Weston	————
Twiss	- - - - -
Moore	-----
Webster	-----



TGH 1995



Figure 3.4

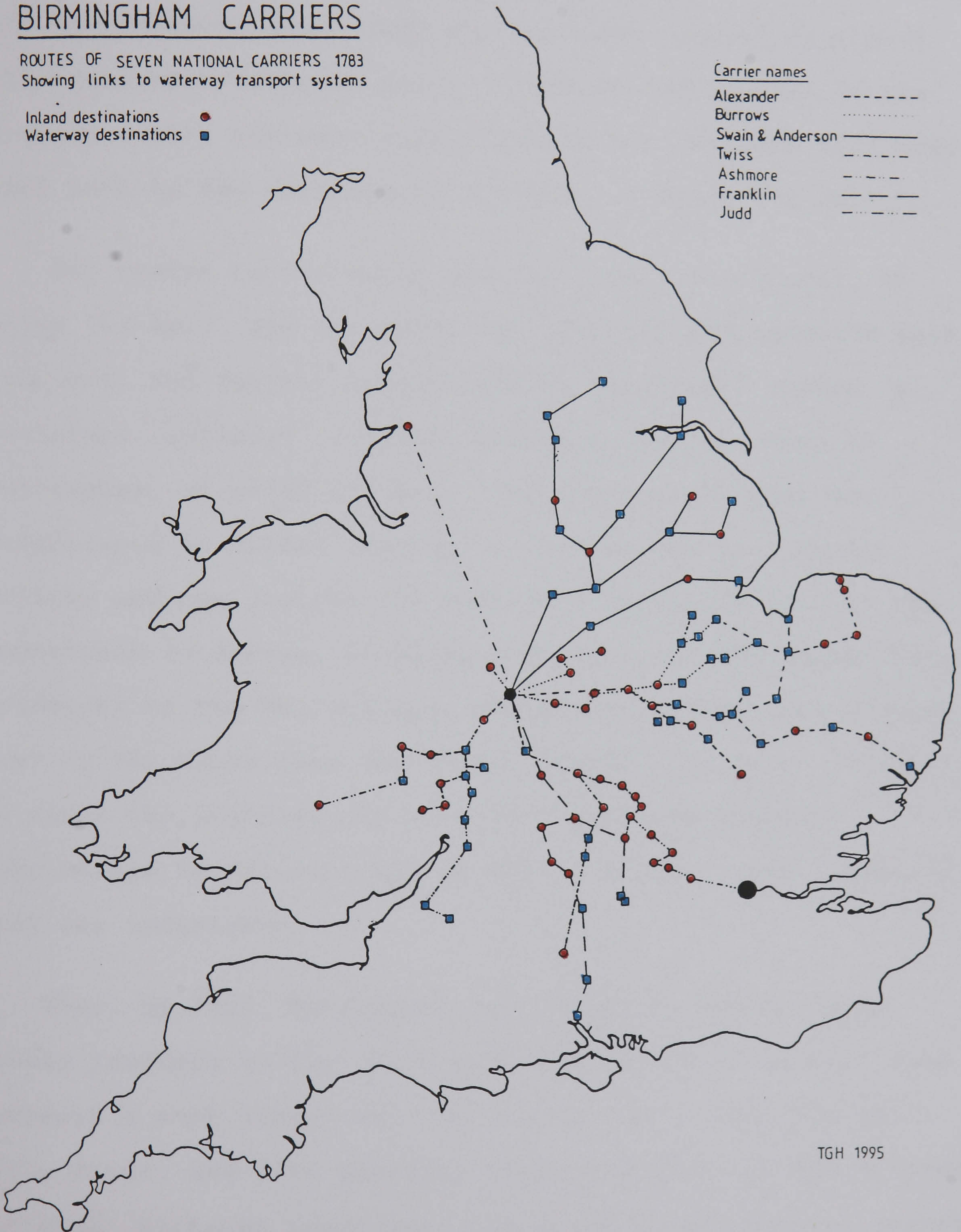
## BIRMINGHAM CARRIERS

ROUTES OF SEVEN NATIONAL CARRIERS 1783  
Showing links to waterway transport systems

Inland destinations    ●  
Waterway destinations    ■

### Carrier names

Alexander	-----
Burrows	.....
Swain & Anderson	————
Twiss	- - - -
Ashmore	— · — ·
Franklin	— · — ·
Judd	— · — ·





nearest river ports with seven journeys per week to Bridgnorth, 22 miles (35 km.), made by 'middling' carriers and nine journeys to Bewdley, 18 miles (29 km.), made by a different group of 'national' and 'middling' carriers. Another link to the Severn valley was established by carrier routes to the Warwickshire Avon. Judd the national carrier called at Stratford-upon-Avon, 21 miles (34 km.), once a week on his journey south, but more significantly six journeys were made each week by two carriers to Evesham, 26 miles (42 km.).

For routes to the north and east, Burton-on-Trent, 26 miles (42 km.), was served by two carriers who operated four journeys, and further down-stream on the Trent, Weston, a principal 'national' carrier, undertook two journeys to Nottingham, 45 miles (72 km.). One journey per week was established to Market Deeping, 67 miles (108 km.) on the Welland and one journey per week by a different carrier was undertaken to Bourne, 65 miles (105 km.), on the Bourne Eau, a tributary of the Welland made navigable in 1781. The nearest port on the River Nene was at Northampton, 43 miles (69 km.), to which two journeys per week were made and further down-stream to Peterborough 68 miles (109 km.) one journey a week was undertaken.

Thus, by 1783, Birmingham was linked by twenty-three weekly journeys to the south west via the river Severn. Five journeys a week linked the town to the north east via the river Trent, and five journeys to East Anglia via the Welland and Nene. Although there were two journeys per week to Oxford, which was the nearest port on the Thames, the main traffic for London prior to the canal link, was achieved by road carriers.



The development of the canal system in Shropshire.

Before 1805, when the Ellesmere canal opened, the only canals in Shropshire served the industries based upon the east-Shropshire coalfield area. These canals because of their varied widths and depths were incompatible with any main-line canal developments and merely linked this industrial area to Shrewsbury, and to the river Severn. The transport on these canals were primarily small tub-boats used to convey coal, ore and limestone to the industrial sites located in this area. The first of these canals was built on the Duke of Sutherland's estate and called the Donnington Wood Canal. This aristocratic family were very active in developing the iron and coal industries, and the duke's brother, Granville, Earl Gower, was familiar with the work undertaken by the Duke of Bridgewater in his mines at Worsley. Gale and Nichols write:

'On 8 September 1764 Granville, Earl Gower, formed a partnership with the brothers Thomas and John Gilbert to develop the mineral resources on his lordship's estates in east Shropshire. This marked the start of the industrial enterprise which took its present name of The Lilleshall Company in 1802. It was not Lord Gower's first attempt at exploiting the minerals of his east Shropshire lands - though it was the first in which he took part personally - and it was not to be the last... Nor was Lord Gower the only local landowner to be taking an interest in the potentialities of Shropshire coal, iron, clay and limestone, though his partnership was to develop into the largest undertaking in the area.'<sup>43</sup>

The initial length of the Donnington Wood canal was 5.5 miles (8.9 km.). It opened in July 1768 and initially carried coal from a mine to a wharf at Pave Lane situated alongside the Shifnal to Newport road. Branches to local lime quarries were

<sup>43</sup> W. K. V. Gale and C. R. Nicholls, The Lilleshall Company Limited: a History, 1764-1964 (1979), p. 11.



soon added, one at Hugh's Bridge which was 2 miles (3.2 km.) in length and almost 43 feet (13 m.) below the existing canal. A system of cranes, which had been pioneered by Brindley for the Duke of Bridgewater's ventures in Lancashire, were used to raise and lower crates of lime or coal. These initiatives demonstrate how some land-owning families were not only personally involved in the construction of canals and systems of transport but also how technological advances were being disseminated between like-minded families.

The Donnington Wood Canal was later connected with three other small scale local canals; the Ketley Canal, 1.5 miles (2.4 km.), the Wombridge canal 1.75 miles (2.8 km.) both opened in 1788 and the Shropshire Canal, initially 7.75 miles (12.5 km.) but extended to Coalbrookdale by a further 2.75 miles (4.4 km.) and opened in 1792. Another canal opened in 1796 was designed primarily to convey coal from the Oakengates area to the town of Shrewsbury. This canal was called the Shrewsbury Canal, it was 17 miles (27 km.) long and built to a larger standard than the other coalfield canals, but its narrow boats were still on a smaller scale than those used on the main canal network.

The East-Shropshire coalfield canals were built primarily to carry raw materials from mines and quarries to the furnaces. Although appearing to be small-scale and of limited length they represent a very sophisticated system. The terrain of the area was variable and new technologies were required to move the tub-boats up and down considerable gradients. The cranes built at Hugh's bridge were superseded by inclined planes. This method of overcoming gradients also became a



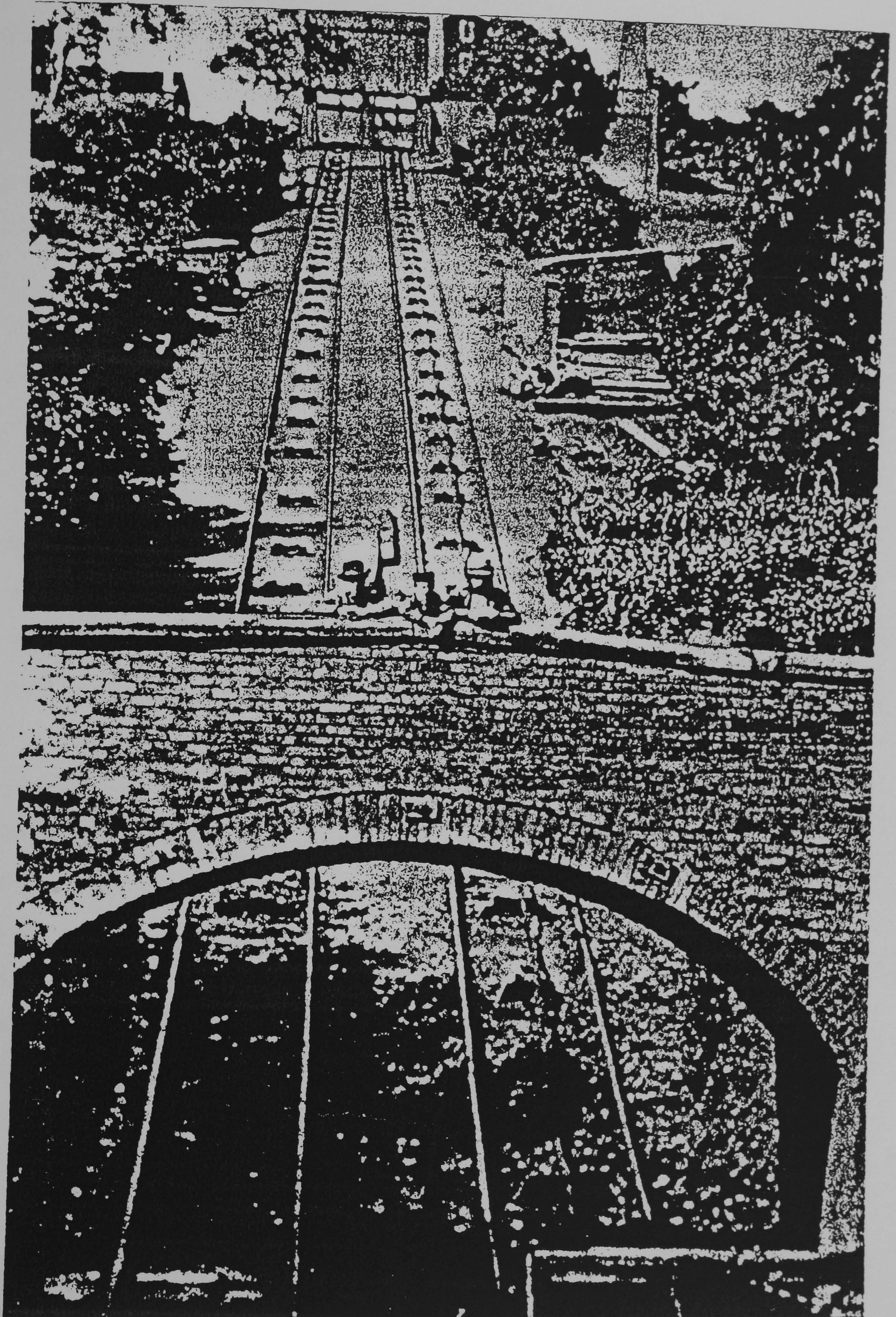
feature on the Ketley and Shrewsbury canals, and as technology advanced steam engines were introduced to power them. On the Shropshire canal, which crossed the ridge between the north-eastern part of the coalfield and the Severn Valley, three tunnels and three inclined planes were built, including the Hay Inclined Plane which is a feature of the Ironbridge Gorge Museum (Plate 3.3). This structure measured 1,029 ft (314 m.) and lowered the tub boats down 198 ft (60 m.) to a canal basin alongside the River Severn, this drop being equivalent to twenty-seven locks on a traditional canal.

Apart from the trading populations of Shrewsbury and Bridgnorth on the river Severn, most small town traders in eighteenth-century Shropshire relied upon the road-carrier networks to link them with their suppliers and their customer hinterlands. However as Wanklyn argues, having a waterway did not necessarily mean that a town became prosperous or developed industries.<sup>44</sup> In his study of the effect of river transport on ports on the river Severn in the seventeenth and early eighteenth centuries, he points to various factors which could affect a town's economic fortunes. He indicated that Shrewsbury may have grown as a port because it was the destination of goods manufactured and supplied by a wide hinterland that included mid-Wales, north Staffordshire, and much of the Cheshire plain. He also indicated how the river trade from Bewdley served the growing industrial areas of Birmingham and the Black Country. Wanklyn also pointed out that Upton, although it was a port, did not expand as an

<sup>44</sup> M. Wanklyn, 'The impact of water transport facilities on the economies of English river ports, c1660-c1760', Economic History Review, vol. XLIX, 1 (1996), p. 22.



Plate 3.3



14. The Hay Inclined Plane in the late 19th century (*Ironbridge Gorge Museum Trust*)

Copied from Barrie Trinder, The Industrial Revolution in Shropshire (1981) Fig 14.



industrial centre. He commented how in that period towns like Shrewsbury, Worcester and Bridgnorth still retained some of the woollen cloth industry, which largely relied upon road transport.<sup>45</sup> In Shrewsbury this industry had been a feature of its medieval economy and the wealth that had been created and invested for centuries gave the town a certain status. From the seventeenth and into the eighteenth centuries Shrewsbury may have maintained its status as a major town as the result of its importance as an administrative centre and a fashionable town, although it did develop some industry based upon its access to a waterway transport system.

Denholm's research into three Staffordshire canal-side towns in the late eighteenth century, demonstrated how different landowners influenced commercial and industrial expansion. He contrasted the development of the towns of Stone, Penkridge and Brewood and stated that Stone, (on the Trent and Mersey Canal and on a main north-south road) expanded because it was largely free of lordly domination. He showed how the trading community of Stone seized the opportunity to increase commercial activity when the canal was built. He then contrasted this expansion with developments at Penkridge (on the Staffordshire and Worcestershire Canal) where some local industrial activity developed and the lack of any such activity in Brewood (on the Birmingham and Liverpool Junction Canal), he concludes:

'Much therefore depended on the interests and initiatives of the dominant families and Penkridge under the care of the ambitious and improving Littletons did better than Brewood under the control of the retiring, recusant, and in the late eighteenth century, impoverished Giffards.

<sup>45</sup> Wanklyn 'the impact of water transport', p. 26.



Urban historians have long recognized the importance of dominant local authorities in accounting for the foundation and survival of medieval towns. It appears that the influence of the local gentry remained an important determinant of urban fortunes in the canal and railway era as well.'<sup>46</sup>

Ellesmere, the first Shropshire town to be linked to the main canal network, not only gave its name to 'The Ellesmere Canal' but also to a new port established at Whitby Wharf, on the Mersey, which was renamed 'Ellesmere Port'. This canal was designed and built to accommodate the standard size narrow boats.<sup>47</sup> Its construction was vigorously encouraged by the principle landowner in Ellesmere, The Duke of Bridgewater, often called 'The Canal Duke'. The Ellesmere Canal started as a very ambitious scheme which was reflected in a later report and oration given at the opening of the Pontcysyllte Aqueduct in 1805.

'The Ellesmere Canal, rather than being one general Canal, is a system of Canals, distributed over the extensive and fertile country, which lies between the banks of the Severn on the South, and those of the Mersey upon the North; and between the skirts of North Wales on the West, and the borders of Staffordshire on the east; a space of fifty miles in length and more than twenty in breadth. This canal will unite the Rivers Severn, Dee and Mersey, and will open an inland navigation from the above mentioned districts to the Ports of Liverpool and Bristol.'<sup>48</sup>

<sup>46</sup> A. F. Denholm, 'The impact of the canal system on three Staffordshire market towns 1760-1850, Midland History, vol. XIII (1988) p. 73.

<sup>47</sup> It was designed for boats 72ft 1inch long by 6ft 10ins. wide. Hadfield, Canals in the West Midlands.

<sup>48</sup> Report of the General Assembly of the Ellesmere Canal Proprietors, 27 November 1805 and Oration delivered at the first opening of the Pontcysyllte Aqueduct 26 November 1805. in E. A. Wilson, The Ellesmere and Llangollen Canal; an historical background (1975), p. 1.



By 1792 two primary routes, referred to as the eastern and western canals, were being explored . A number of surveyors and engineers were employed including John Duncombe of Oswestry, Joseph Turner assisted by Thomas Morris, John Chamberlain and William Cowley, and William Jessop. This proliferation of surveyors led to disputes and arguments about the various schemes proposed. However, following a meeting of the general committee in Ellesmere in 1793 Thomas Telford was appointed as 'the general Agent, Surveyor, Engineer, Architect and Overlooker of the Canal and Clerk to this committee'.<sup>49</sup> The discussion that ensued at this meeting show that Telford was to take control and he was required 'to submit such drawings to the construction and correction of Mr William Jessop or the persons employed by the said company for the time being as their principal engineer...'<sup>50</sup>

The canal was initially planned with terminal points at Ellesmere Port, Chester, Ruabon and Shrewsbury. While its primary purposes was to provide a link between the Ruabon

<sup>49</sup> Minutes of the General Committee of the Ellesmere Canal Company at the Royal Oak in Ellesmere on 23rd September 1793. from 'A collection of letters and papers pertaining to the Ellesmere Canal, from the collection of Messrs John Knight, Solicitors of Whitchurch'. Shropshire Records and Research Centre (SRRC), 6000/15006. The correspondence also show that the Ellesmere canal Bill received its second reading on 8th March 1793 having been delayed from 1st March 'owing to several members being on that day to dine with the Mayor in the City.' Letter to John Knight from W. Turner. SRRC 6000/15009.

<sup>50</sup> For this task he was to be given an annual salary of £500 from which he had to pay some of his subordinates. However an addition to the minutes dated 18th December show that the committee accepted his suggestion that he was paid £300 and they would pay the other engineers and clerks employed. Telford was also required initially to collect the payments due from the subscribers and according to Wilson the first call on shareholders was made on 5th May 1796. Wilson, The Ellesmere p. 3.



coalfield and the Mersey, a secondary intention was to link this coalfield area with the Severn at Shrewsbury. However it was not only local gentry who were backing the canal scheme, many ordinary tradesman like those in the town of Whitchurch could see the advantages of a new transport link. In Whitchurch in c.1793 a petition was organized requesting members of parliament to support the Ellesmere Canal Bill.<sup>51</sup> Their efforts were also supported by the local MP. Sir Richard Hill who wrote to them from London on 26 February 1793 pledging his support for their petition.<sup>52</sup>

The petition demonstrated that it was not only the gentry who would receive revenue from their shares, royalties, and property transactions, but also that the local tradesman and farmers anticipated some benefit. The petition contains 264 names of men and woman who lived in the town of Whitchurch, its sub-area Dodington, and in 38 smaller settlements in its rural hinterland. The list included 33 gentleman and 11 gentlewoman, 4 clerks in holy orders and 1 dissenting minister, 4 surgeons, 114 farmers, graziers or rural butchers, 3 millers and 4 cheese factors. It listed 4 maltsters, 22 publicans or innkeepers, 29 shopkeepers of various types, 25 craftsman and others such as gardeners, officers of excise and watchmen. Only two names were listed without a status or occupation, and overall for the 103 names that refer to the town of Whitchurch 67 names could be cross-checked to the town's entries in the Universal British Directory Vol.IV (1798).

<sup>51</sup> Copy of a Petition of the inhabitants of Whitchurch and neighbourhood to Parliament in favour of the Ellesmere Canal, SRRC, 6000/15008.

<sup>52</sup> Letter from Sir Richard Hill to Thomas Murrall Esq. SRRC, 6000/15014.



Although there were disputes over where the canal would run into Whitchurch and whose land would benefit from the siting of the wharf a plan dated 1796 (Figure 3.5) showed how the canal would be connected to the town.<sup>53</sup> This plan also showed the line of a proposed branch to Prees, but this was only built as far as Quina Brook. On this un-finished branch a basin was eventually constructed on the turnpike road from Wem to Whitchurch.<sup>54</sup> Further a wharf was established at Edstaston which served the town of Wem.

In October 1795 Telford was able to give a report on the progress of the canal.<sup>55</sup> This report showed that the canal from Chester to Ellesmere port was completed and that revenue had begun to flow in from the use of 'a Passage-boat, by which there has been a regular conveyance along that line since 1st day of July last.' This had earned the company £394 and commented further that boats for the conveyance of heavy goods had been provided, and that the goods carried to the Chester Fair were encouraging. He also noted that the Llanymynech branch was completed and that its connection to the isolated Montgomeryshire Canal was about to be completed.

<sup>53</sup> The collection of John Knight has letters and papers about the dispute between a Mr John Trevor who was a cheese-factor and Mr Thomas Taylor who does not appear in the petition but who is described in the U.B. Directory as a writing master. SRRC, 6000/15006-15145. The plan (Figure 3.5) is contained in a miscellaneous collection SRRC 3127.

<sup>54</sup> The Knight correspondence shows that there were compensation disputes over the site at Quina Brook. A basin was created and a lime-works established on the land of Admiral George Bowen. He claimed damages to his land caused by the lime-works and was awarded an annual rent of 10 guineas by the Canal Company. SRRC 6000/15097, 15098 and 15100.

<sup>55</sup> Ellesmere Canal Navigation, report by Thomas Telford dated 21st October 1795. SRRC, 6000/15035.







Telford also referred to the proposed link with the Severn at Shrewsbury and how five miles of this canal had been completed. This would have been to Weston Lullingfields and was the all that was ever built of this proposed link.

By January 1800 Jessop was able to report that he and Mr Telford had conducted a survey of all the canal works undertaken so far, and that the construction of the basin at Ellesmere Port was virtually completed.<sup>56</sup> It is clear from this report that whilst the eastern routes were nearing completion there still lingered some hope of a western route from Trevor, via Wrexham to Chester. The report showed that a small section of this canal had been cut at Brymbo, but Jessop commented that, with the construction of 'railways' linking the coalfields of the area with the Dee and Chester, the building of the western canal was not of immediate importance. He also questioned the need to carry the canal across the Pontcysyllte aqueduct which was partially completed, and suggested that the piers should be used to carry a railway to a wharf at Froncysyllte rather than follow Telford's design. He also reported that in Shropshire 30 miles of canal were now completed.

In 1804 a short branch into a canal-basin at the town of Ellesmere was completed and eventually in 1805 the main line of the canal from Trevor to Ellesmere Port was open for traffic. The route was primarily that which had been proposed for the eastern route except that, instead of joining the

<sup>56</sup> A report to the General Committee of the Ellesmere Canal Company by William Jessop 24th January and received at their meeting of 5th February 1800. SRRC, 6000/15037.



Chester Canal at Tattenhall, an easterly route was chosen. This linked the Ellesmere to the Chester canal at Hurleston near Nantwich by means of a fall of six locks at Grindley Brook, and at Hurleston another fall of 4 locks which took the canal down on to the Cheshire Plain.<sup>57</sup> In 1811 the Whitchurch branch (only 1 mile long) was completed and a basin was constructed that served the town.

The completion of the Ellesmere Canal allowed two Shropshire towns, Ellesmere and Whitchurch, direct access to the main-line canal system and provided wharfage for the towns of Wem (2 miles, 3 km) and Oswestry (3 miles, 5 km). For a period Ellesmere gained some economic benefit from the canal, the main offices of the canal company, and a boat construction and repair yard were built close to the town, and an extensive basin and wharf were also constructed which encouraged some industrial development.<sup>58</sup> However, for Ellesmere much of the canal traffic was by barges 'passing through' from the mines, quarries and industrial area that developed around the terminus at the Pontcysyllte Aqueduct.

Apart from the growing demand for coal, limestone was in great demand in the late eighteenth century. Limestone was

<sup>57</sup> Hadfield, Canals of West Midlands p. 178, and personal experience of navigating these locks in 1997.

<sup>58</sup> Some of the buildings survive today, including The Canal Company's three story warehouse. Wilson records how the Bridgewater Iron Foundry was developed which not only made castings for the Duke's estate but also for the Canal Company and. In 1832 the town's gas works was built by the basin and he also records that R. & J Tilson in 1834 sold from their premises on the wharf a range of timber, and builders merchandise. This business that appears to have been taken over later by John Jones, see Figure 5.7 below. Wilson The Ellesmere & Llangollen Canal. p. 58.



used as a flux in smelting iron, it was burnt to create slaked lime for making plaster and mortar in the building trade, and it was used as a fertilizer on poor land to raise the pH value of the soil. In 1796 the branch of the Ellesmere Canal built to Carreghofa gave easy access to the limestone hills of Llynclys and Llanymynech on the Shropshire-Montgomeryshire border. In this area considerable limestone quarries were developed. This branch also brought the canal within three miles (4.8 km.) of the town of Oswestry and a wharf to serve this town was constructed at Maesbury. In 1797 the Ellesmere Canal was linked to the Montgomeryshire Canal and thereby the market town of Welshpool obtained a link to the main canal system. At this period the Montgomeryshire canal terminated at Garthymyl and as Hadfield says:

'Being an agricultural canal, the main trade was in limestone brought down from the Llanymynech and neighbouring quarries by tram-roads to the canal, and then boated upwards to be burnt at waterside kilns... There was a slow growth in profitable merchandise traffic from the Ellesmere Canal. Other traffics were in building stone, slates, timber and bark.'<sup>59</sup>

Hadfield then quotes from Martyn who in 1801 had commented upon the approach roads to the end of the canal between Welshpool and Newtown, he said they were:

'... so torn up by the wagons loaded with stones and coal to which may be added immense trees for ship timber that are in constant motion to and from the... Canal, that they are almost impassable.'<sup>60</sup>

<sup>59</sup> Hadfield, The Canals of the West Midlands, p. 192.

<sup>60</sup> T. Martyn 'An Account of a tour of Wales', 1801, N.L.W.: in C. Hadfield, The Canals of the West Midlands, p. 192.

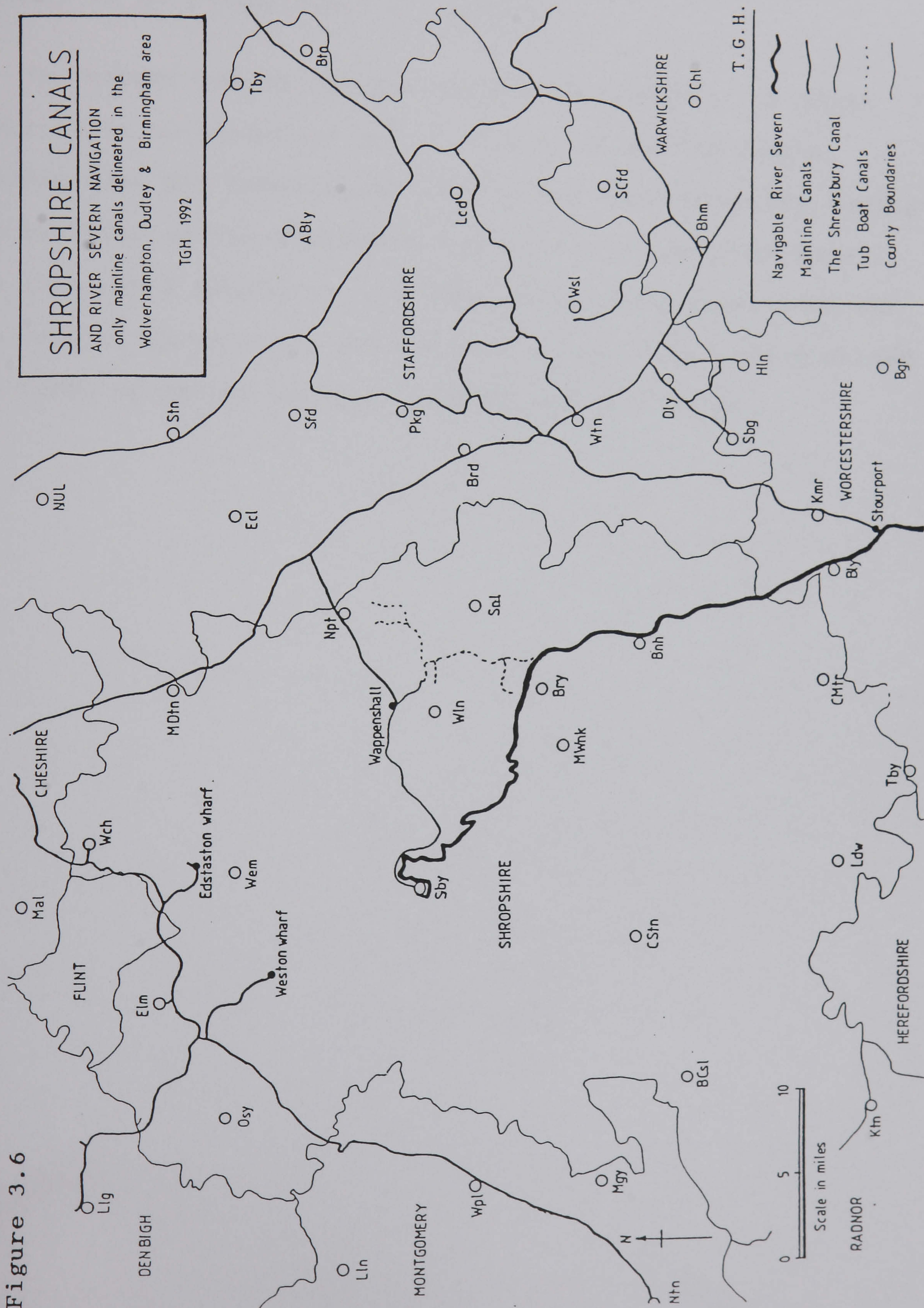


The development of the river and canal network - conclusions.

This chapter has demonstrated how improvement to many rivers was undertaken in the eighteenth century, and how for much of the Shropshire Area the river Severn provided an important transport route to the south-west. It has shown however, that the road transport network linked the area to the river Trent and to the river systems and coastal ports on the Wash. It has also explained how canals were built which connected the major river systems; the Trent, Mersey, Severn and Thames, together and how by the 1770's Birmingham, which was already developing as a hub for road transport, also became the hub of a canal system. It has shown how, in this developing environment some carriers, like Pickfords, responded to these changes by providing integrated road and waterway transport systems.

In looking at the county of Shropshire (the core area) it has shown how a map of a canal system can give a false impression, because many of the canals were built on a very small scale and could not take the full size 'narrow boats' (Figure 3.5). However, it has shown how the Ellesmere Canal, a main-line canal, was built to serve the northern part of the county and the towns of Ellesmere and Whitchurch. It was built primarily to connect the Ruabon coalfield and its developing industrial area with the Mersey. However, by a branch it provided a link which also connected the limestone quarries of Llanymynech to many canal-side lime kilns and thus supplied an agricultural demand for hydrated lime. By 1819 the link made between the Ellesmere and Montgomeryshire canals enabled water-borne supplies to reach the town of Welshpool and







Newtown. With the use of a selection of reports and papers on the development the Ellesmere canal, some of the problems faced by the canal builders is demonstrated. This chapter has also given some insight into the interest shown by town traders in main-line canal development.

In chapter six below, the further developments of these canals will be discussed and it will be shown how Thomas Telford also met problems of terrain and land-ownership during the building of the Birmingham and Liverpool Junction Canal; how this canal eventually provided a main-line canal link for the town of Shrewsbury; and how wharfs were built which served the towns of Market Drayton, Newport and Wellington.



#### CHAPTER 4 THE COASTAL SHIPPING NETWORK.

It has been shown in chapter 3 above, that an integrated network of inland waterways was developed which made links with coastal ports where, as Willan's research has showed, that in the period 1600-1750 coastal shipping was well developed.<sup>1</sup> Since Willan's time scholars at Wolverhampton University have undertaken some sophisticated work using the Gloucester Port Books. They have demonstrated how the carriage of goods on the Severn was of great importance to the towns in the Shropshire area and the river Severn acted as a feeder route to the ports of Gloucester and Bristol.<sup>2</sup> Taking into consideration the warnings expressed by Wakelin, the wider network of coastal shipping is now examined by reference to the evidence which can be gleaned from a selection of port books and directories of the mid to late-eighteenth century.<sup>3</sup>

<sup>1</sup> T. S. Willan, The English Coasting Trade: 1600-1750, (1938), p. xi.

<sup>2</sup> Research such as A. P. Wakelin, 'Pre-industrial trade on the River Severn; a computer-aided study of the Gloucester Port Books, c 1640 - c 1770', unpub. PhD thesis Wolverhampton Polytechnic, (1991); and that used in the published works of N. Cox and A. P. Wakelin, 'Imagination and innovation of an industrial pioneer: the first Abraham Darby', Industrial Archaeology Review, XII, 2, (1990); M. D. G. Wanklyn, 'The Severn navigation in the seventeenth century: long distance trade of Shrewsbury boats' Midland History, vol. XIII (1988); M. Wanklyn 'The impact of water transport facilities on the economies of English river ports, c1660-c1760' Economic History Review, XLIX (1996). These works are discussed in chapter 3 above.

<sup>3</sup> Wakelin warns that the port books are a complex source to use and that comparisons in the amount of traffic between one period and another is difficult due to changes in the way in which the port book entries were undertaken by Customs officials. Wakelin, 'Pre-industrial trade on the River Severn' pp.91 -99.



The Gloucester Port Book of 1764<sup>4</sup>

To assess if coastal ports were served from Gloucester and if so explore whether the vessels which sailed from Gloucester fitted into a wider coastal network a database covering all the entries in the period 26th December 1764 - 21 December 1765 was constructed. The Port Book entries recorded the date when the vessel docked at Gloucester or left port, the vessels name, her owner and master, the port from which she had last sailed or her destination and her cargo. In this period there were 232 entries, 77 related to inward and 155 to outward voyages. These journeys were made by 60 different named vessels operated by 69 different masters. Of these 9 vessels recorded inward voyages only, 26 outward voyages only and 25 voyages both inward and outward.

Table 4.1 and Figure 4.1 show that in this period vessels from Gloucester served fifteen ports. The port of Bristol with 86 outward journeys (56%) by 33 vessels, and 27 inward journeys (35%) with 11 vessels, was the dominant port served from Gloucester.<sup>5</sup> The variation between the number of inward and outward voyages being partially explained by vessels that operated circular routes, such as Gloucester to Bristol to Chepstow and back to Gloucester. However, as Wakelin discovered, some vessels may have returned to Gloucester from

<sup>4</sup> PRO E190/1269/1 and E190/1269/5 held on microfilm number 386.30942241/GLO which was kindly made available at the Telford Campus of Wolverhampton University.

<sup>5</sup> In the period studied by Wakelin he records that 'more than 70% of all recorded outward voyages from Gloucester were destined for Bristol.' Wakelin, 'Pre-industrial trade on the River Severn' p. 107. The 1765 figure of 56% of outward journeys supports the argument that Bristol continued to be the dominant destination port for down-river traffic.



TABLE 4.1

**COASTAL SHIPPING ROUTES - GLOUCESTER FROM 26 DEC 1764 TO 21 DEC 1765**  
Showing the number of outward and inward journeys and number of vessels serving each port.

Port Name	Outward		Inward	
	Journeys	Vessels	Journeys	Vessels
Bideford	--	--	2	2
Bridgwater	23	3	6	2
Bristol	86	33	27	11
Cardiff	--	--	1	1
Carmarthan	10	5	--	--
Chepstow	3	1	7	5
Haverfordwest	--	--	1	1
London	9	5	10	4
Milford	--	--	3	2
Minehead	3	1	--	--
Neath	8	5	4	2
Newport	3	1	--	--
Scilly Isles	1	1	--	--
Swansea	9	5	--	--
Tenby	--	--	16	9

Notes: It would appear that the vessels serving Carmarthan on the outward journeys then proceeded to Tenby for the inward journeys. Other vessels appear to serve more than one port for example vessels outward to Bristol sometimes call at Chepstow on the return journey.

Source of Tables 4.1 to 4.4: Gloucester Port Books P.R.O. E190/1269/1 and E190/1269/5.







Bristol in ballast or with cargo that was not recorded. The analysis showed that certain vessels, like the 'Betsy' and the 'Goodhope', only plied the route between Gloucester and Bristol having a normal turn-around time of about 14 days.

After Bristol the next most important destination was Bridgwater, and it is clear from the records that this port was served on a regular basis by two vessels, the 'Joseph and Mary' with 12 outward journeys, and the 'Seven Brothers' with ten outward journeys. As Table 4.1 indicates the number of journeys made beyond Bridgwater along the west coast of England were limited, although one journey was made to the Scilly Isles by the 'John Byrken' which normally confined its route to serving Neath and Swansea. As Figure 4.1 indicates a number of ports along the south coast of Wales were linked to Gloucester, the most distant being Haverfordwest. Although a detailed analysis of cargoes has not been undertaken it appeared that many of the inward journeys by vessels from south Wales were carrying coal, for example; the 'Seaflower' which docked on 24th June 1765 from Tenby and recorded a cargo of 33 chaldrons and 12 bushels of coal.

The highest number of outward journeys along this coast were to Carmarthan, and it is clear from the record of inward journeys that vessels that served Carmarthan then proceeded to Tenby before returning to Gloucester. It will be noted that apart from one voyage to the Scilly Isles most vessels from Gloucester confined their routes to what may be termed the Bristol Channel triangle from Gloucester to Hartland Point in Devon and St. David's Head in Pembrokeshire an area in which Wakelin had also noted that some vessels undertook circular



routes which he referred to as 'cross-regional voyages'.<sup>6</sup>

Table 4.2 compares the estimated mileage of the complete journey with the turn-around time of the vessels making regular journeys to particular ports. This suggests that the normal turn-around time to Bristol was fourteen days and to Bridgwater thirty-one days. However care should be exercised in reading too much into these approximations because the sample was very small and some vessels may have called at other ports en-route. The analysis does suggest however that there were regular timed services to certain ports, that to Bridgwater appears to be monthly service, and that to London three-monthly. As will be shown below, this regularity of service to named destinations is indicated by the trade directories entries for coastal shipping which were published towards the end of the eighteenth century.

The analysis in Table 4.3 shows that 16 vessels sailed only once from Gloucester, and 15 vessels only twice. Because the records also show the master's and owner's name it is possible to identify which coastal vessels were owned by their masters. However it will be noted that the masters of some coastal vessels changed, for example the 7 vessels that are recorded as sailing outwards four times per year had fifteen different masters, these were vessels owned by merchants.

The analysis also suggests that, apart from regular routes to particular ports, some vessels appear to have served irregular routes by picking up cargoes in which ever port they

<sup>6</sup> Wakelin, 'Pre-industrial trade on the River Severn' pp. 112-113.



TABLE 4.2

COASTAL SHIPPING ROUTES - GLOUCESTER FROM 26 DEC 1764 TO 21 DEC 1765

Estimated mileage and turn-around times from Gloucester and returning to Gloucester for vessels serving particular ports. Based upon the dates shown for vessels inwards and outwards from Gloucester. The turn-around times vary considerably, but those listed represent what appear to be the minimum times for a journey which included loading and unloading time.

Port served	Estimated mileage to port	Mileage for out & in journeys	Probable normal turn-around time in days
Bristol	40	80	14
Bridgwater <sup>1</sup>	60	120	31
Swansea	100	200	28
Neath	100	200	28
Carmarthan	150	300	40
Tenby	150	300	40
Scilly Isles <sup>2</sup>	250	500	30
London	400	800	3 months

<sup>1</sup> It would appear that the vessels serving Bridgwater from Gloucester did so on a regular monthly basis.

<sup>2</sup> Only one journey was made in the year to the Scilly Isles and the vessel used called at Tenby on the return journey.



TABLE 4.3

**COASTAL SHIPPING ROUTES - GLOUCESTER FROM 26 DEC 1764 TO 21 DEC 1765**  
 Analysis of the outward vessels showing the frequency to a given destination per annum, the number of journeys made, the number of vessels and masters employed.

Frequency to a destination per annum.	Number of journeys made p.a.	Number of vessels used p.a.	Number of masters employed p.a.
1	16	16	16
2	30	15	20
3	18	6	8
4	28	7	15
5	5	1	2
6	6	1	4
7	--	--	--
8	16	2	4
9	--	--	--
10	--	--	--
11	22	2	6
12	--	--	--
13	--	--	--
14	14	1	1

TABLE 4.4

**LONDON VESSELS SERVING GLOUCESTER FROM 26 DEC 1764 TO 21 DEC 1765**  
 Showing the dates inwards and outwards for vessels by name.

Name of Vessel	Date inwards	Date outwards
Priscilla	-----	Jan 7th
Brudenall	Feb 5th	Mar 2nd
Newnham	Feb 4th May 18th Sep 4th	----- Jul 3rd Oct 2nd
Severn	Feb 18th Jun 19th Oct 31st	Mar 2nd Aug 15th Nov 23rd
Bewdley	Apr 25th Aug 7th Dec 16th	May 8th Sep 14th -----



docked. Although only one years voyages were analysed, the high number of single voyage vessels (16) and double voyage vessels (15) between Gloucester and a particular destination suggests that the type of vessel which in the later 19th century was called 'a tramp' had already been foreshadowed by some coastal vessels in the eighteenth century.

Apart from the coastal vessels that served the Bristol Channel, five vessels recorded journeys to London. As Table 4.4 shows of three of these appear to make regular journeys. As will be discussed below the Universal British Directory for London (1793) records 10 named vessels which served the port of Gloucester.

It is clear therefore that, as Wakelin noted for the sample years from 1666 to 1722, the bulk of the down-river traffic from Gloucester was destined for Bristol.<sup>7</sup> Further it is realized that exploration of other contemporary coastal port-books would undoubtedly enhance the limited nature of this particular analysis.

#### The Bristol Port Books 1775 and 1785.

For an analysis of coastal trade from Bristol the entries from two Port Books for the half years June to December 1775 and 1785, were made into a database. The analysis showed how a network of ports were served by coastal vessels from the mid to the late eighteenth century.<sup>8</sup> Like the Gloucester Port Book

<sup>7</sup> Wakelin, 'Pre-industrial trade on the River Severn' p. 110.

<sup>8</sup> The microfilm copy of these two Bristol port books PRO E190/1230/5 for 1775 and PRO E190/1237/4 for 1785 were also recorded on the Gloucester Port Book microfilm 286.30942241/GLO held by University of Wolverhampton.



mentioned above, the Bristol Port Books record the date when the vessel left port, the vessel's name, her owner and master, her home port, destination and cargo. For example: Figure 4.2 shows that the 'Refiner of Swansea' sailed from Bristol on the 26th August 1775 for Swansea with a mixed cargo consisting of Household Goods, Laths, Pot Clay, Calamy (Zinc ore), Salt, Muscovy and Refined Sugar, Molasses, Linen Drapery, Nails, Cheese, Hard Soap, Bar Iron, Tobacco and Snuff.

The analysis of the ports in the Bristol Channel triangle which were served in the two six-monthly periods in the years 1775 and 1785 is shown in Table 4.5. This clearly indicates that there was still a regular service between Bristol and Gloucester with 14 vessels (17% of all vessels) and 23 journeys (14% of all outward journeys) in 1775 and the same number of vessels and 21 journeys in 1785. It shows that Bristol was connected on a regular basis with many ports in this area with Bridgwater recording eight different vessels (and 25 journeys) in 1775 and 8 vessels and 20 journeys in 1785. Other ports which had a regular service were Barnstaple, Bideford, Carmarthan, Milford, and Swansea. The vessel called the 'Refiner of Swansea' (shown in Figure 4.2) made regular monthly journeys to Swansea with mixed cargoes under the independent mastership and ownership of Barnaby Hawkins. Another vessel the 'Constant Trader of Carmarthan' undertook four journeys to Carmarthan in 1775 and 3 journeys to Carmarthan and one journey to Liverpool in 1785. The latter demonstrating how some vessels that were normally confined to serving ports in the Bristol Channel triangle would on occasions undertake more extensive journeys.







Table 4.5

COASTAL SHIPPING ROUTES - BRISTOL - 1775 & 1785

Showing the Bristol Channel triangle ports served by outward-bound vessels in the Bristol Port Books, June-December 1775 and June-December 1785 and the number of vessels and journeys undertaken in each half-year.

Port Name	1775		1785	
	No. vessels	No. journeys	No. vessels	No. journeys
Aberthaw	1	1	1	6
Barnstaple	9	13	6	11
Bideford	7	13	7	12
Bridgwater	8	25	9	20
Carmarthan	8	18	8	19
Chepstow	1	1	--	--
Clovelly	1	1	--	--
Gloucester	14	23	14	21
Haverfordwest	2	2	2	5
Ilfracombe	2	3	4	4
Llanelli	1	1	1	1
Milford	6	17	5	12
Minehead	5	8	5	6
Neath	3	11	1	5
Newport	2	2	2	2
Swansea	8	21	8	22
Tenby	3	4	3	9
Totals	81	164	77	155

Sources: The figures analysed in tables 4.5 to 4.9 are all for the periods June-December 1775 and June-December 1785 and were extracted from the Bristol Port Books PRO E190/1237/4 and E190/1230/5.



Table 4.6 shows that 66 vessels in 1775 and 82 vessels in 1785 made journeys to ports in Cornwall, the south coast of England, London and the east coast as far north as Leith (Edinburgh). In 1775 the long journey to Leith by the east coast was made by the 'Active' whose home port was Woodbridge in Suffolk. In 1785 the same journey was undertaken by the 'Richard of Chepstow'.<sup>9</sup> As the table indicates, for the two periods, there appear to have been regular services to London, Padstow, Plymouth, Southampton, St Ives and Truro and perhaps to other ports on these coasts at a less frequent rate.

The west and north coasts of Wales, and the west coast of England and Scotland also had some regular services, as indicated in Table 4.7. The longest journey was from Bristol to Greenock which in each six-month period was served by four vessels. The service to Liverpool increased between the two periods with six journeys in 1775 and twelve in 1785 thus suggesting a growing connexion between these two major western ports. On the west coast of Wales ports such as Aberystwyth and Cardigan were also served on a regular basis.

As with the analysis of the Gloucester port book above, the frequency of vessels from Bristol (Table 4.8) suggests that there were regular journeys following well prescribed routes alongside occasional journeys to particular

<sup>9</sup> After the opening of the Forth and Clyde Canal in 1790 some vessels were able to follow the western route to serve the port of Leith. Unlike the English canals of this period it was built on a larger scale with a surface width of 56 ft and a bottom width of 27 ft and was about 8 ft 6ins deep, by the 1830's the depth was increased to 10 ft by raising the banks. It could thus take sea-going vessels. J. R. McCulloch, A Dictionary, Practical, Theoretical, and Historical of Commerce and Commercial Navigation (1839), p. 223.



Table 4.6

COASTAL SHIPPING ROUTES - BRISTOL - 1775 & 1785

Showing the Cornish, South and East-coast ports beyond the Bristol Channel triangle served by outward-bound vessels in the periods extracted from the Bristol Port Books.

Port Name	1775		1785	
	No. vessels	No. journeys	No. vessels	No. journeys
Alloa ? *	1	1	--	--
Chichester	--	--	2	2
Dartmouth	2	2	11	11
Exeter	7	9	8	8
Falmouth	4	5	10	11
Fowey	2	2	2	3
Hull	1	1	--	--
Leith (Edinburgh)	1	1	1	1
London	16	17	13	16
Looe	1	1	1	1
Newcastle	1	2	2	2
Newhaven	--	--	1	1
Padstow	9	10	6	10
Penzance	5	5	2	2
Plymouth	3	7	4	5
Poole	2	2	3	3
Southampton	5	6	5	6
St Ives	3	6	6	7
Sunderland	--	--	1	1
Truro	2	3	4	4
Whitby	1	1	--	--
Totals	66	81	82	94

\* This entry was extremely difficult to decipher and it is assumed to be Alloa on the Firth of Forth.



Table 4.7

COASTAL SHIPPING ROUTES - BRISTOL - 1775 & 1785

Showing the west & north-Wales coasts and north-west coast ports beyond the Bristol Channel triangle served by served by outward-bound vessels extracted from the Bristol Books.

Port Name	1775		1785	
	No. vessels	No. journeys	No. vessels	No. journeys
Abercastle(Mathry)	--	--	1	1
Aberystwyth	4	5	7	8
Cardigan	8	8	8	10
Chester	2	2	6	6
Fishguard	1	1	--	--
Greenock	4	4	4	4
Lancaster	1	1	3	3
Liverpool	5	6	11	12
Whitehaven	1	1	--	--
Totals	26	28	40	44

Table 4.8

COASTAL SHIPPING ROUTES - BRISTOL - 1775 & 1785

Analysis of the outward vessels showing the frequency to a given destination with the number of journeys made, the number of vessels and masters employed extracted from the Bristol Books.

Frequency	No. of Journeys		No. of Vessels		No. of Masters	
	1775	1785	1775	1785	1775	1785
1	122	139	122	154	122	139
2	48	46	24	23	28	26
3	36	24	12	8	18	9
4	36	16	9	4	12	4
5	25	35	5	7	7	8
6	6	18	1	3	1	3

Note: Variation of totals between various tables is due to the fact that some vessels served more than one destination, e.g. The John of Clovelly made two journeys to Falmouth and one to Truro in 1775 and the Swallow of Poole made one journey to Poole via Dartmouth in 1785 and both destination were counted.



destinations. The records for Bristol which give the home ports of the vessels also suggest that some were 'tramping', for example in 1775 the 'John and Elizabeth of Chichester' was loaded for a journey to Padstow, the 'George and Bella of the Isle of Man' for Fowey, and the 'Lovely Peggy of Pwhelli' for Exeter. In 1785 the records sometimes list more than one destination, for example the 'Elizabeth of Bristol', the 'Maria of Milford' and the 'Expedition of Emsworth' all left for journeys to Southampton and Poole and the 'Jacomina of Emsworth' left for Falmouth and Truro.

The records suggest therefore that there is a mixture of regular and infrequent journeys to particular destination but as Figures 4.3 and 4.4 show, a regular pattern of ports were served in 1775 and 1785, especially when the home ports of the vessels, which were not listed as destinations for a particular voyage, are indicated on the maps.

A summary of the three areas served from Bristol is shown in Table 4.9. This demonstrates how the bulk of coastal traffic from Bristol was confined to the Bristol Channel triangle with 60% of the journeys in 1775 and 53% of the journeys in 1785. Overall the records used indicate that the number of vessels serving this area rose from 173 in 1775 to 199 in 1785, and the number of journeys from 273 (1775) to 293 (1785). However more detailed research over a wider range of records and a longer period would be needed before this apparent rise in activity could be confirmed. Further research over a longer period might also indicate that what appear to be one-way voyages are part of a longer-term regular pattern. Although only two short periods have been analysed the data







Figure 4.4

DESTINATIONS OF COASTAL SHIPS FROM BRISTOL

In the period June to December 1786. Showing the number of vessels making outward journeys, the number of journeys and ports served and the home ports of the vessels which were not listed as a destination.

Source: Bristol Port Book (PRO E190/1237/4 - M/T 386.30942241/GLO)

Destination and number of voyages ○<sup>3</sup> Home ports not destinations ●





TABLE 4.9

COASTAL SHIPPING ROUTES - BRISTOL - 1775 & 1785

Summary showing the number and percentage of vessels and journeys for the Bristol Channel triangle; the Cornish, south and east-coast ports; the west & north-Wales coasts and north-west English and Scottish coast ports; served by outward-bound vessels in the periods June-December 1775 and June-December 1785. Data extracted from the Bristol Port Books.

Port Name	1775		1785	
	No. vessels	No. journeys	No. vessels	No. journeys
Bristol Channel	81 (47%)	164 (60%)	77 (39%)	155 (53%)
South/east coast	66 (38%)	81 (30%)	82 (41%)	94 (32%)
Wales/north west	26 (15%)	28 (10%)	40 (20%)	44 (15%)
Totals	173 (100%)	273 (100%)	199 (100%)	293 (100%)*

\* In 1785 the number of journeys exceeds the number of entries because some vessels called at more than one destination.



extracted from these two Port Books does indicate that a Bristol-based coastal-shipping network was well established by the mid-eighteenth century.

The Bristol Port Books and the Universal British Directory.

Between the years 1791 and 1798, Barfoot and Wilkes published a five-volume trade directory called the Universal British Directory.<sup>10</sup> It covered almost all small towns in England and Wales and for forty-one coastal towns the entries included details of the vessels used for coastal shipping. To analyse this information a database of 1,458 entries was created; the details could include, the name of the vessel, the master's name, the port and wharf from which it sailed, its destination, and sometimes the wharf at its destination. Overall 1,439 named vessels appeared in the records, with destinations recorded for 1,077 of them. Within the database 1,033 entries covering thirty-seven ports gave full details of the names of ships and their destinations. By analysis of the named ships, it was possible to identify 137 reciprocal routes with the details of the same vessel shown at each port. In two cases the analysis showed that three ports were linked together.

The largest numbers of vessels recorded for any port was 432 for London and 217 for Whitehaven, but for the latter, although the names of the vessels and their masters were recorded, no destinations were given. The next largest ports which listed coastal shipping were Bristol with 184, Hull with

<sup>10</sup> Barfoot & Wilkes, The Universal British Directory, Vol's. 1-5 (1791-1798).



158 and Southampton with 114 vessels. Surprisingly the port of Liverpool had only 42 entries, and of these only 19 were coastal vessels and the remaining 23 vessels being bound for Manchester.<sup>11</sup> Although the directory for Liverpool did not record many coastal vessels it was served by many incoming vessels and was shown as the destination for twenty-one vessels from other ports.<sup>12</sup> Therefore although the directory suggests a paucity of coastal traffic from Liverpool it is obvious that, like the other major international port of Bristol, it could have been a coastal outlet point for goods and materials sent northwards from the Shropshire area by the canal system.

For some ports the data was limited, for example the entry for Bideford merely said: 'Large quantities of coarse earthenware are manufactured here, and carried to various parts of England and Wales. Many cargoes of oak bark are

<sup>11</sup> To check whether the low number of coastal vessels for Liverpool was an error the details were cross-checked to Lewis's Liverpool Directory (1790), The Liverpool Directory & Guide (1794) and Gore's Liverpool Directory (1796). All these directories gave similar information. It appears therefore that whilst Liverpool had expanded as an international port it was of relative insignificance as a port for coastal shipping. It is interesting to note that ten of the vessels from Liverpool to London were recorded in all the above directories as: 'in the contract cheese trade'. This indicates a waterway outlet for the cheese industry of Cheshire and North Shropshire.

<sup>12</sup> There were four vessels from Bristol, five vessels from Chester and six vessels from Lancaster. Further there were six vessels from London that served Liverpool as well as Garstang and the Lancashire and Cheshire coast, five vessels that served Liverpool, Manchester, north Lancashire and Whitehaven and ten vessels serving Liverpool on route for Whitehaven.



annually exported from hence to Ireland and Scotland'.<sup>13</sup> The entry for the port of Gloucester was also limited saying: 'Several vessels are constantly employed coast-ways, many trows every spring to Bristol; the number of trows employed betwixt Shrewsbury, Worcester, etc to Bristol is very considerable.'<sup>14</sup>

As has already been discussed the port of Bristol was a destination for the many barges trows and small vessels that sailed down the river Severn. In addition to the coastal ports recorded in the Port Books of 1775 and 1785 the Bristol entry in the Universal British Directory<sup>15</sup> listed vessels that navigated the Severn as far as Shrewsbury and also vessels that served Irish ports (Figure 4.5). To assess if any continuity of coastal trade over a wider period could be identified, the data from the directory was merged with the databases constructed from the Bristol Port Books of 1775 and 1776. As Table 4.10 indicates, although the number of identifiable vessels serving the three areas of the Bristol Channel, Wales the south, east and west coasts was less in 1791, the number of ports served remained fairly constant between the three periods. Taking into consideration that the data extracted from the Bristol Port Book only covered two six-month periods, it can be argued that a network

<sup>13</sup> Barfoot & Wilkes, U.B. Directory, Vol. 2 (1791), p.436. The entries for Bristol listed four vessels destined for Bideford, the 'Ann', the 'Dispatch', the Polly', and the 'Thomas' but the earlier Port Book evidence shows that the first three of these vessels were on regular runs between Bideford and Bristol. This suggests that the Bideford exports was either via Bristol or were cargoes collected by 'tramping' vessels.

<sup>14</sup> Barfoot & Wilkes, U.B. Directory, Vol. 4 (1794), p. 190.

<sup>15</sup> Barfoot & Wilkes, U.B. Directory, Vol.2 (1791), pp. 191-4,



Figure 4.5

DESTINATIONS OF COASTAL SHIPS, TROWS  
AND BARGES FROM BRISTOL 1791

Showing the number of vessels serving each  
destination.

Source: Universal British Directory (1791).





Table 4.10

A comparison of the number of ports served and different named vessels recorded in the periods June-December 1775 and June-December 1785 from the Bristol Port Books and 1791 from the Universal British Directory..

Coastal area served	Number of Ports served			Number of different named vessels used		
	1775	1785	1791	1775	1785	1791
Bristol Channel	17	15	21	81	77	54
South/east coast	18	18	17	66	82	39
Wales/north west	8	7	5	26	40	9
Severn Valley	--	--	7	--	--	29
Ireland	--	--	8	--	--	23

Table 4.11

Analysis of ship names showing the continuity of the vessels used between the periods June-December 1775 to June-December 1785 from the Bristol Port Books and to 1791 from the Universal British Directory..

Coastal Area Served	1775-85	1785-91	1775-91	1775-85-91
Bristol Channel	10	16	4	8
South/east coast	2	8	2	7
Wales/north west	3	2	0	1
Bristol Channel & Severn Valley	0	2	2	0
Wales/north west & South/east	2	1	1	1
Bristol Channel & South/east	1	0	0	0
South/east & Ireland	0	1	0	0
Totals	18	30	10	17



of regular coastal services from Bristol to particular ports was already well established by the mid-eighteenth century. This network theory is strengthened by an analysis of named vessels which can be identified from one period to the next. As Table 4.11 shows a total of fifty-seven vessels listed in the directory of 1791 can be identified in the port books of the two earlier periods (30 from 1785-91, 10 from 1775-91 and 17 in all three periods).

The London entries in the Universal British Directory (1793).

Ever since the publication of The Carriers Cosmography (1637), London directories have carried some details of coastal shipping. For example Lowdnes' London Directory of 1780 and 1788 listed the destinations and London wharfs from which vessels sailed. Bailey's Carriers List (1785) included some shipping information in a section headed 'Coach and Waggon List, etc.'.<sup>16</sup>

As was stated above, the Universal British Directory contained far more entries for coastal ships from London than any other port, and the data was shown as a separate list headed:

Goods for; the VESSELS in the TRADE; with the MASTERS NAMES, where to be spoken with, and Time of sailing.'<sup>17</sup>

The listing was sub-divided under each wharf and gave information on the agent, the ship's name, destination, master's name, and in some cases additional information such

<sup>16</sup> Bailey's Carriers List (1785), p. 17.

<sup>17</sup> Barfoot and Wilkes, The Universal British Directory, 2nd edn., 1st issue, (1793), pp. 621-632. Note that for the analysis of London shipping the second edition was used.



as the passenger carrying capacity of the vessel (Figure 4.6).

A database was created from this list which was also linked to another database containing details of river ports (Appendix 3). This allowed firstly an analysis of all the vessels, their masters and the general area served by each vessel; and secondly an analysis of the coastal shipping routes to all English, Scottish and Welsh destinations. (Appendix 4)

From this analysis it became clear that in some cases the same coastal vessel was calling at more than one London wharf. From the 432 entries the number of vessels actually operating was 404, sailing from twenty six wharfs.<sup>18</sup> As had been experienced in the foregoing analysis of Bristol some problems were caused by the varied spelling of masters names and duplication of the names of vessels. For example a vessel 'The Polly' was shown sailing from six different wharfs with three routes, two along the south coast and one up the east coast. The 'Polly' serving the south coast had two different destinations and masters and was counted as two different vessels. The east coast route however showed three entries for the destination of Gainsborough and one for Gainsborough, Burton, Derby, Birmingham and the Midlands. The masters name was spelt as Donking, Donkin and Dunting. This was obviously the same master and vessel working from four wharfs to Gainsborough for transhipment along the Trent.

The analysis showed that the main area served by coastal shipping from London was the east coast, with 238 vessels

<sup>18</sup> Twenty-two vessels called at more than one wharf, seventeen at two wharfs, four at three wharfs and one at four wharfs.



## LONDON WHARVES AND VESSELS - UNIVERSAL BRITISH DIRECTORY 1793

Chichester	Judith, <i>Gable</i>	Sails every 14 days.
Arundel, & places adjacent		
Chester	Hannah and Maria, <i>Morris</i>	Adventure, <i>Bickers</i>
Conway		
Holywell		
Parkgate		
St. Asaph		
Whitchurch, & places adjacent	Friendship, <i>Smetham</i>	Ann and Susannah, <i>Groves</i>
Weymouth		
Bridport		
Chard		
Dorchester		
Portland	Robert, <i>Collier</i>	The Wharfinger or Master to be spoken with at the Wharf and on 'Change
Sherborne		
Yeovill, and places adjacent		
Dartmouth		
Totness		
Astburton	Susannah, <i>Phillips</i>	
Lynn		
Edmondsbury		
Cambridge		
Thetford		
Torbay	Hero, <i>Rakestraw</i>	Boats every day, by <i>Giles and Kellys</i>
Gravesend		
Chichester		
Barnstaple		
	Union, <i>Bursacot</i>	Lively, <i>Blake</i>

## CUSTOM-HOUSE QUAY.

NANGREAVE.

Hull	}	Mould,	<i>Mason</i>
York		Eagle,	<i>Scull</i>
Beverley		Barnevelt,	<i>Wright</i>
Gainsborough		York,	<i>Ware</i>
Halifax		Daking,	<i>Antonie</i>
Leeds		Juno,	<i>Dearman</i>
Lincoln		Sail every 6 days.	
Manchester			
Nottingham			
Sheffield			
Wakefield, & all parts of York-shire, Lincoln-shire, Warwick-shire, Stafford-shire, & Derby-shire, contiguous to the River Humber.			

Accommodation for passengers.  
The Wharfinger and Masters to be spoken with as above, at the Bear and Wheatbeet, in Thames-street, and on the Irish walk, 'Change house.

Colchester, and } May Flower Packet,  
places adjacent } *Fleet*  
Takes in goods Friday & Saturday.  
The Master, or J. B. Tuck for him, to be spoken with at the Three Crowns, Thames-street.

## GLASGOW WHARF, Bur-

PINKERTON.

Glasgow	Glasford, <i>Grice</i>	A ship sails every ten days, with excellent accommodations for passengers to Leith. The Captain to be spoken with on the Scotch Walk, and at the New England Coffee-house, Threadneedle-st. mornings and evenings on board.
Paisley		
Greenock		
Port Glasgow		
Falkirk		
Air		
Kilmarnock		
Leith, and places adjacent		

## Carron Ships

Aberdeen  
Stone Haven  
Leith

Aberdeen

## GLOBE, Hungerford-Stairs.

PHILLIPS.

Richmond	Boats daily.
Twickenham	
Teddington	
Brentford	
Kingston	
Thames Ditton	
Hampton Court	
Weybridge	
Shepperton	
Uxworth	
Walton	
Kew	
Sunbury	
Petersham	



working from 20 wharfs. The second important area was the south coast with 102 vessels from 16 wharfs. The west coast from Land's End northwards had limited coastal services from London, only 64 vessels. It appears that some London ships avoided rounding Land's End as destinations on the north coast of Cornwall and Devon were listed for vessels that only served south coast ports. It is concluded that goods for these destinations were sent by an overland route, or were placed on other coastal vessels that were rounding Land's End. These destinations are called 'overland ports' in the analysis.

Although most coastal vessels would have carried mixed cargoes, it appears that some ships specialized in particular trades. The 'Prince of Wales', 'Spackman' 'George and Francis', 'Furley' and one of the vessels called 'Polly' all had destinations on the south coast: 'Falmouth, Penzance, Truro and all places adjacent in Cornwall'. These ships were grouped under a heading 'Tin Ships' and all sailed from Beal's Wharf suggesting that they specialized in carrying for the Cornish tin trade. Another group of five vessels operated from Glasgow Wharf and were listed as 'Carron Ships' (see Figure 4.6).<sup>19</sup> These were initially involved in carrying supplies for, and goods from, the 'Carron Iron Works' in Scotland.

Although these coasting vessels were primarily involved in carrying goods, some also carried passengers. For example six vessels that sailed to ports within the river Humber area had 'Accommodation for Passengers' and sailed every six days. To

<sup>19</sup> Barfoot & Wilkes, U. B. Directory, p. 621; I. Bowman, 'The Carron line: part 1, Carron sail 1759-1850' Transport History, vol. 10, no 2 (1979).



book passage on these vessels or arrange for goods to be despatched contact had to be made with: 'The Wharfinger and Masters to be spoken with as above at the Bear and Wheatsheaf, in Thames-street, and on Irish walk, Exchange hours.'<sup>20</sup> A total of twenty-four vessels provided passenger accomodation of which three followed the east coast to Scotland, carrying goods and passengers as far north as Arbroath.

One vessel which served Scottish destinations was 'The Glasford', its passenger accomodation was described as 'excellent' and its destinations were shown as Leith (the port for Edinburgh) and Glasgow. To reach the latter it would appear that this vessel like others serving the Firth of Clyde, used the Forth and Clyde Canal which had opened in 1790. Forrester states that: 'ships up to 100 tons eventually used the Canal...' and '... 10,785 ships used the waterway in 1850'.<sup>21</sup> Whether this particular vessel actually travelled as far as Glasgow is not made obvious, goods and passengers may have transferred to Glasgow-bound vessel which sailed from Leith to the west coast, or travelled by road. The fact that this vessel is shown as performing a service that left London every ten days suggests that it only went as far as Leith.

Another vessel that appears to have passed through the Forth and Clyde canal was 'The London'. On its route

<sup>20</sup> Barfoot & Wilkes, U. B. Directory, p. 624.

<sup>21</sup> D. A. R. Forrester, The Great Canal that linked Edinburgh, Glasgow and London: a study of the Finance and Administration of the Forth and Clyde navigation 1768-1816 AD with the first published Accounts for 1815 AD (1980).



northwards it called at Berwick, and Dunbar, before docking at Leith, it was then listed as serving Stirling, Glasgow, Paisley, Dumbarton, Greenock, Kilmarnock, Ayr and Dumfries. carried passengers having accommodation shown as 'cabins two gns' and 'steerage one gn'. The accommodation was described as 'good', but no sailing times were given for this vessel.

Passenger services were also provided on vessels serving the west-coast routes. Nine vessels sailed every fourteen days from Cotton's Wharf on routes that served Liverpool and towns around the Mersey estuary including, Warrington, Stockport, Leek and Macclesfield. These vessels also served other towns in Lancashire and Cumbria, namely Bury, Lancaster, Kendal, and Whitehaven. A further five vessels sailed with passengers for the locations listed above, and other inland destinations were also listed such as Blackburn, Bolton, Saddleworth and Penrith. It is clear that these vessels could not proceed by water to all the destinations listed, many of which were totally land-locked. As has been mentioned above some destinations listed for road carriers suggest an element of road and waterway transport, and conversely these shipping routes appear to contain an element of road transport.

The times of sailing were recorded for 106 entries for vessels (not barges), of these seventy-three related to east coast, twenty-three to south coast and ten to west-coast routes. An analysis of the probable turn-around of these vessels was undertaken. Along the east-coast the shortest time period for sailing from London was every five days to Scotland. The vessels listed were the 'Active', 'Jane', 'Jay' and 'Peggy' calling at ports on the north-east coast beyond



the Firth of Forth. As it would be impossible for coastal vessels to complete the journey and return to London in five days, it is clear that, just as in road carrying, some shipping masters operated in partnerships. The sharing of a route by a group of individual owners is demonstrated by the entries for four vessels sailing from Harrison's Wharf to the Stour Valley. These vessels were recorded as sailing weekly on what was a relative short distance, about 100 miles (161 Km.). The vessels were 'The Garrick', 'The Rigby', 'The Friends Goodwill' and 'The Thorn'. A note below the entries states: 'These were the 4 united packets, which sail every Friday.'<sup>22</sup>

Nineteen vessels were shown making weekly voyages to Teeside and Tyneside ports and many of these were undoubtedly involved in the coal trade. Their turn-round time could not have been one week, and therefore some form of collaboration must have been in operation. It would appear that in good weather conditions a vessel could turn around in a two week period. An insight into the turn-around times of coastal vessels can be judged from a detailed analysis of Port Book entries such as those analysed below, or from a set of records known as 'The Account of the Voyages and Account of the Crew'. The latter were completed from 1835 by each ship's master. As Willan has stated:

'Sea-borne traffic has always been the subject of governmental regulation and supervision. This has arisen from a variety of state interests, amongst which the desire to collect revenue from goods carried, the necessity for providing protection against enemies and the need to encourage a form of transport which was the chief auxiliary support for that ill-defined body, the Royal

<sup>22</sup> Barfoot & Wilkes, U. B. Directory, p. 626.



Navy, were most prominent. Some if not all these motives applied to the coasting as well as the overseas shipping.'<sup>23</sup>

Since 1747, shipping and the employment of men as seaman was strongly controlled, and muster rolls had to be kept for each ship. Under the Shipping Act of 1786 (26 Geo. III, c. 60) all ships had to be registered 'having a Deck, or being of the burthen of fifteen Tons or upwards.'<sup>24</sup> From 1835 forms were completed for each ship on a six-monthly basis and deposited at the port at which the ship was registered listing crew members. These are called 'Agreements and Crew Lists'; and applied to international shipping and coastal vessels of eighty tons or more registered at British ports. Although this type of record was not designed to give details of the timing of voyages if these sources were fully researched it may be possible to see how many coastal voyages could be achieved in the six month period. An example of this type of record is for a ship called 'The Emery', which was registered at Scarborough and was employed on a regular route between Stockton-on-Tees and London in the half year July-December 1835.<sup>25</sup> As Figure 4.7 shows, five journeys were recorded from Stockton to London in six months starting on: 1st July, 1st September, 15th October, 1st November and 1st December. Thus giving the time between the start of each voyage as 62, 45, 17 and 30 days. If this was completed accurately it suggests that in good weather it was possible to complete a turn-around time

<sup>23</sup> Willan, The English Coasting Trade, p. 1.

<sup>24</sup> Willan, The English Coasting Trade, appendix 6, p. 217.

<sup>25</sup> 'Agreements and Crew Lists: series I, BT 98, - Scarborough, P.R.O.



AN ACCOUNT OF THE VOYAGES OF THE 'EMERY' OF SCARBOROUGH - 1835

AN ACCOUNT of the VOYAGES in which the Ship	of	has been engaged in the Half-Year
commencing on the 1 <sup>st</sup>	One thousand eight hundred and 5 <sup>th</sup>	and ending on the 3 <sup>rd</sup> Day of
1822	One thousand eight hundred and 5 <sup>th</sup>	and of all the Persons (Master and Apprentices included) who have
belonged to such Ship during that Period.		

# ACCOUNT OF THE VOYAGES

[illegible]

# ACCOUNT OF THE CREW.

[illegible]



of seventeen days for a voyage of about 300 miles (483 km.). Taking into consideration the time required for loading and unloading it suggests that a journey between Teeside and London could be completed in one week. Against such a fast turn-around time must be set the sixty-two day period between the 1st July and 1st September. This suggests considerable delay, perhaps due to weather, the need for laying up the vessel for repair, or a fall in the demand for coal. The document for 'The Emery' is only one example of one coasting vessel and further research would be required before a better picture of timings for voyages could be calculated.

An analysis of the database was undertaken to ascertain whether the twenty-six London wharves specialized in serving particular destinations or areas of coastline. In this analysis the east, south and west coasts, were divided into areas and the number of vessels and wharfs that served them were counted (Table 4.12). It has already been noted above that some coastal vessels called at more than wharf and as Table 4.13 shows, eleven wharfs (42%) catered for shipping serving particular coasts. Of these five catered for a specific area, two on the south coast (Kent) and three on the east coast (East Anglia, Lincolnshire & S.E Scotland). One wharf 'Chester and Brewers' served only one area on the east coast (East Anglia) and another on the south coast (Kent). This suggests that some wharfs may have specialized in handling agricultural produce. It has been noted above, that Beale's Wharf catered for Cornish 'Tin Ships' and Glasgow Wharf for 'Carron Ships', but they also served a variety of other areas and like the remaining wharfs appeared to have no



Table 4.12

COASTS AND AREAS SERVED BY SHIPPING FROM LONDON WHARFS - 1793		
Number of ships and number of wharves per area.		
EAST COAST	Number of ships	Number of wharfs
Area name		
Durham	28	5
East Anglia	44	7
Humber	39	6
Lincolnshire	33	6
Scotland - Firth of Forth	17	4
Scotland - Highland	5	2
Scotland - North East	37	4
Scotland - South East	10	3
Tyneside	35	4
Yorkshire	12	4
SOUTH COAST	Number of ships	Number of wharfs
Area name		
Cornwall - South	9	3
Devon - South	21	4
Dorset	11	3
Hampshire	28	5
Kent	23	10
Sussex	11	4
WEST COAST	Number of ships	Number of wharfs
Area name		
Bristol & Severn Valley	6	2
Devon/Cornwall - North	8	2
Liverpool	6	1
North-west	20	4
Scotland - Firth of Clyde	12	2
Wales - North	7	3
Wales - South	7	2
Wales - West	3	1



Table 4.13

COASTAL SHIPPING - NUMBERS OF SHIPS PER LONDON WHARF SERVING COASTS AND AREAS

WHARF	SHIPS				COASTS		AREAS			
	TOTAL	EAST TO COAST	SOUTH TO COAST	WEST TO COAST	TOTAL	COASTS SERVED	EAST COAST	SOUTH COAST	WEST COAST	TOTAL AREAS
BEALS SOUTHWARK	18	8	10	0	2	E/S	1	2	0	3
BELL DOWGATE	32	32	0	0	1	E	4	0	0	4
BROOKES QUEENHITHE	2	0	2	0	1	S	0	1	0	1
BULLS QUEENHITHE	1	0	1	0	1	S	0	1	0	1
CHAMBERLAINS SOUTHWARK	17	5	12	0	2	E/S	1	2	0	3
CHESTER & BREWERS,	7	1	6	0	2	E/S	1	1	0	2
COTTONS SOUTHWARK	38	7	16	15	3	E/S/W	1	5	3	9
CUSTOM HOUSE QUAY	7	7	0	0	1	E	2	0	0	2
GLASGOW EAST SMITHFIELD	13	8	0	5	2	E/W	2	0	1	3
GRIFFINS SOUTHWARK	15	1	3	11	3	E/S/W	1	2	2	5
GUN & SHOT SOUTHWARK	17	12	2	3	3	E/S/W	2	1	1	5
HARRISONS ST CATHERINES	13	12	1	0	2	E/S	2	1	0	3
HAWLEYS HERMITAGE BRIDGE	29	18	4	7	3	E/S/W	3	1	1	5
HAYES SOUTHWARK	24	8	16	0	2	E/S	1	3	0	4
HOARS HERMITAGE BRIDGE	29	29	0	0	1	E	3	0	3	3
IRONGATE ST CATHERINES	9	9	0	0	1	E	1	0	0	1
PARSONS STAIRS	6	6	0	0	1	E	1	0	0	1
PICKLE HERRING SOUTHWARK	11	0	0	11	1	W	0	0	5	5
RED LION DOWGATE	17	17	0	0	1	E	4	0	0	4
SCOTCH WHARF	4	4	0	0	1	E	2	0	0	2
SMART & DICE	24	21	3	0	2	E/S	2	1	0	3
STANTONS SOUTHWARK	30	21	4	5	3	E/S/W	2	1	1	4
SYMONDS TOOLBY ST	7	7	0	0	1	E	1	0	0	1
THREE CRANES CHEAPSIDE	24	23	1	0	2	E/S	4	1	0	5
TOPPINGS SOUTHWARK	19	4	15	0	2	E/S	2	3	0	5
YOXALLS SOUTHWARK	19	0	8	11	2	S/W	0	2	2	4



particular allegiance to a particular area or type of trade.

The destinations of coastal shipping and barges from London in 1793.

The analysis above gave a broad picture of the coasts and areas served by vessels sailing from London wharfs. However a more detailed analysis was undertaken of the destinations served by coastal ships, estuary-sailing hoys or barges, and river barges. From a total of 801 entries 677 were for England and Wales and 124 were for Scotland. The number of destinations listed totalled 458 (405 in England and Wales and 53 in Scotland) and these were analysed by five types; coastal ports, river ports, canal ports, 'overland ports' (see page 191 below), and inland destinations. Inland destinations were those which were not located on the coast or a navigable waterway system, and were therefore served by road transport from the nearest river, canal or coastal port.

Because barge traffic was included in this additional analysis a further area the 'Thames Valley' was added to the categories shown in Table 4.12 above. In this analysis there was a total of 521 destinations listed of which 289 (55%) were ports, of which 151 (29%) were on the coastline and 138 (26%) were on navigable rivers or canals (Table 4.14). The analysis also showed that 232 (45%) of the destinations fell into the category 'inland' of which 205 (39%) were land-locked destinations and 27 (5%) which were on coasts or rivers but were reached by an overland route. The fact that 39% of destinations listed for coastal or river shipping were not accessible for shipping or barges adds credence to the claim that the 1793 lists represent an integrated transport system.



Table 4.14

NUMBER OF DESTINATIONS OF COASTAL SHIPS AND BARGES FROM LONDON  
WHARVES - 1793 SHOWING AREA SERVED AND TYPE OF DESTINATION

Coast Served	Area served	Number & type of destinations served in an area, or en-route to an area		
		Coastal Ports	River + (Canal) Ports	Inland + (Overland) Town/ports
East	Durham	1	2	7
"	East Anglia	15	19	34
"	Humber	1	17 (4)	22 (1)
"	Linconshire	1	12 (9)	16 (4)
"	Scotland Firth of Forth	10	1	2 (7)
"	Scotland Highland	8	0	1
"	Scotland North-East	13	1	6
"	Scotland South-East	2	0	5
"	Tyneside	2	1	1
"	Yorkshire	4	0	2
South	Cornwall - south	9	0	3 (1)
"	Devon - south	5	1 (1)	13 (2)
"	Dorset	7	0	11 (1)
"	Hampshire	6	3	5
"	Kent	18	6	19
"	Sussex	9	4	12
"	Thames Valley	0	33	10 (5)
West	Bristol/Severn valley	2	9	2
"	Devon/Cornwall - north	10	0	6
"	Liverpool/Mersey	1	3 (2)	5
"	North-west	3	2	14 (1)
"	Scotland - Clyde valley	6	2	2 (5)
"	Wales - north	7	2 (1)	7
"	Wales - south	6	2	0
"	Wales - west	5	1	0
Totals		151	138	232

Notes: Because some destinations are served from more than one route the total figure varies from the overall total of destinations.  
Inland destinations are those places with no navigable waterway in 1793.  
Overland destinations are ports served by an overland route from a port.



Although only 5% of the destinations were what has been called 'overland' and were served by routes that crossed land they are an interesting group. For example they included the major port of Liverpool which was served by some coastal ships that followed west-coast routes. However Liverpool, Warrington and Manchester were also shown as destinations for ships which followed the east-coast routes to the Humber and Lincolnshire. Across the north of England various routes existed, one was via the Trent and Mersey canal and goods had to be transhipped at Hull or Gainsborough. Another probable route was from the Humber via the Calder and Hebble navigation (made navigable to Sowerby Bridge in 1770), and then by road for twenty-mile over the Pennines to Manchester. Another could have followed the river Don to Fishlake ferry (the nearest navigable point to Sheffield opened in 1751) and then used the many carrier routes operating from Sheffield. In his study of road transport Hey comments upon the regular cross-Pennine routes which emanated from Sheffield, and refers to routes to Manchester in 1787: 'Likewise in 1772 two Sheffield carriers made a formal arrangement whereby Thomas Lidgard, who operated a service from Lincoln to Sheffield, promised to deliver all Manchester-bound goods to Richard Gardiner, who in return accepted goods at his Manchester warehouse that were bound for places on Lidgard's route.' and 'Another major destination was Manchester, which was reached by six services.'<sup>26</sup>

Hey also comments upon the connection between carrier destinations and inland or coastal ports: 'In 1773, the Derby Mercury advertised the fact that Bromwell Powell's waggon came

<sup>26</sup> D. Hey, Packman, Carriers and Packhorse Roads (1980), pp. 221-222



weekly from Bewdley on the Severn, through the Black Country to Lichfield, Burton and Derby, where it met John Anderton's Sheffield waggon, which in turn connected with northern carriers going as far as Kendal.<sup>27</sup> John Anderton (or Anderson) would appear to be the same road carrier who appears in the Birmingham directories of the 1770's and 1780's as Cheese and Swain, or Swaine and Anderson who served the route to Yorkshire including Sheffield, (see Figure 3.4. p. 146 above). This route was earlier covered by W. Weston as is shown in Figure 3.3 (p. 145 above). The reference to the surname Powell suggests that there may be a family connexion with Thomas Powell, the son of the Derbyshire vicar, who migrated to Shrewsbury (Appendix 2, page 4) and became a partner of the carrier John Bather. However no family link has so far been found.

Hey further comments upon Sheffield's eastward carrier routes and their connexion to carriers from some inland ports, he says: 'Wasteney's two carts ... headed for Worksop and Retford thus linking with carriers to Gainsborough, Horncastle and Louth.'<sup>28</sup> The importance of Gainsborough has already been discussed and by this time Louth was on the Louth Canal opened in 1770, and Worksop and Retford were on the Chesterfield Canal opened in 1777. Horncastle was not connected to the river navigation until 1802 although seven miles south of the town a short canal known as Gibson's or the Tattershall Canal opened in 1786 and connected Tattershall to the Witham navigation and thereby to Boston and the coast.

<sup>27</sup> Hey, Packman, Carriers, p. 221.

<sup>28</sup> Hey, Packman, Carriers, p. 223.



Cross-Pennine road transport is also highlighted by other inland destinations, such as Skipton in Yorkshire, it was listed for coastal routes followed by west-coast shipping. Although Skipton was on the Yorkshire section of the Leeds and Liverpool canal (opened in 1777), the canal was not completed from coast to coast until 1816. The towns of Skipton, and Blackburn, were served by six ships which docked at Preston on the Ribble, and from there the logical route would be by road.

In 1793 Bristol, Bath and Gloucester, on the west coast, although they were served by sea were also served by barges following the Thames and Severn canal. However Taunton another west-country destination was served by four vessels from Stanton's Wharf, and seven vessels from Topping's Wharf, these docked at Topsham and Exeter on the south coast. As a number of other towns between Exeter and Taunton were also mentioned for this shipping route they must have been linked by cross-country road carriers from Exeter,

The Hampshire coastal ports of Portsmouth and Lymington and also the river ports of Winchester (on the Itchen) and Ringwood (on the Avon), were served by seven ships from Chamberlains wharf. However Ringwood was also served by five ships from Cotton's Wharf which docked at Poole, and they are also shown as serving the inland destinations of Shaftesbury and Wincanton. Whilst it is possible that these ships may have followed the river Avon to Ringwood it is more likely that the goods were transhipped to road transport at Poole.



### The Coastal Shipping Network - Conclusions.

In Figure 4.8 and 4.9 the coastal, inland ports and other inland destinations served from London, with the numbers of ships that served them in 1793 were mapped. These maps in conjunction with Figure 4.5 demonstrate that by the end of the eighteenth century a complex distribution network had evolved using coastal vessels, waterway barges and road transport.

As Figure 4.8 shows the greatest number of coastal ships from London were serving ports in the growing industrial areas. Ten ships served ports on the river Don and fifteen served Bawtry on the river Idle providing outlets for the metal-based industries of north-Derbyshire and south-Yorkshire. Up to sixteen ships served the Trent as far as Nottingham, and ten had the industrialised town of Birmingham as a destination and using the canal system connected to the Trent. Stourbridge was the destination for a further ten ships via the Severn and Stourbridge canal. This too was an iron producing area which had been created along the Stour valley by the Foley family and whose descendants were active in the building of the Stourbridge Canal. By 1793 the Stourbridge and Dudley canals, south of the Sedgley-Dudley ridge had been connected to the Birmingham Canal by the Dudley Tunnel thus linking both the south and north areas of the industrialised Black Country with the Severn and the Trent. Although by this time Wealden ironworking had ceased, the tin and copper mining areas of Devon and Cornwall were linked by regular coastal routes to the port of London. Seventeen ships served Totnes and ten served Penzance, as well as ten ships serving the China Clay area of St. Austell. Another group



Figure 4.8

## COASTAL, RIVER and CANAL DESTINATIONS

Of Vessels, Barges and Hoys ex London Wharves 1793

Numbers recorded for each destination in the Universal British Directory

- (10) = 10 vessels via East Coast and Trent & Mersey Canal

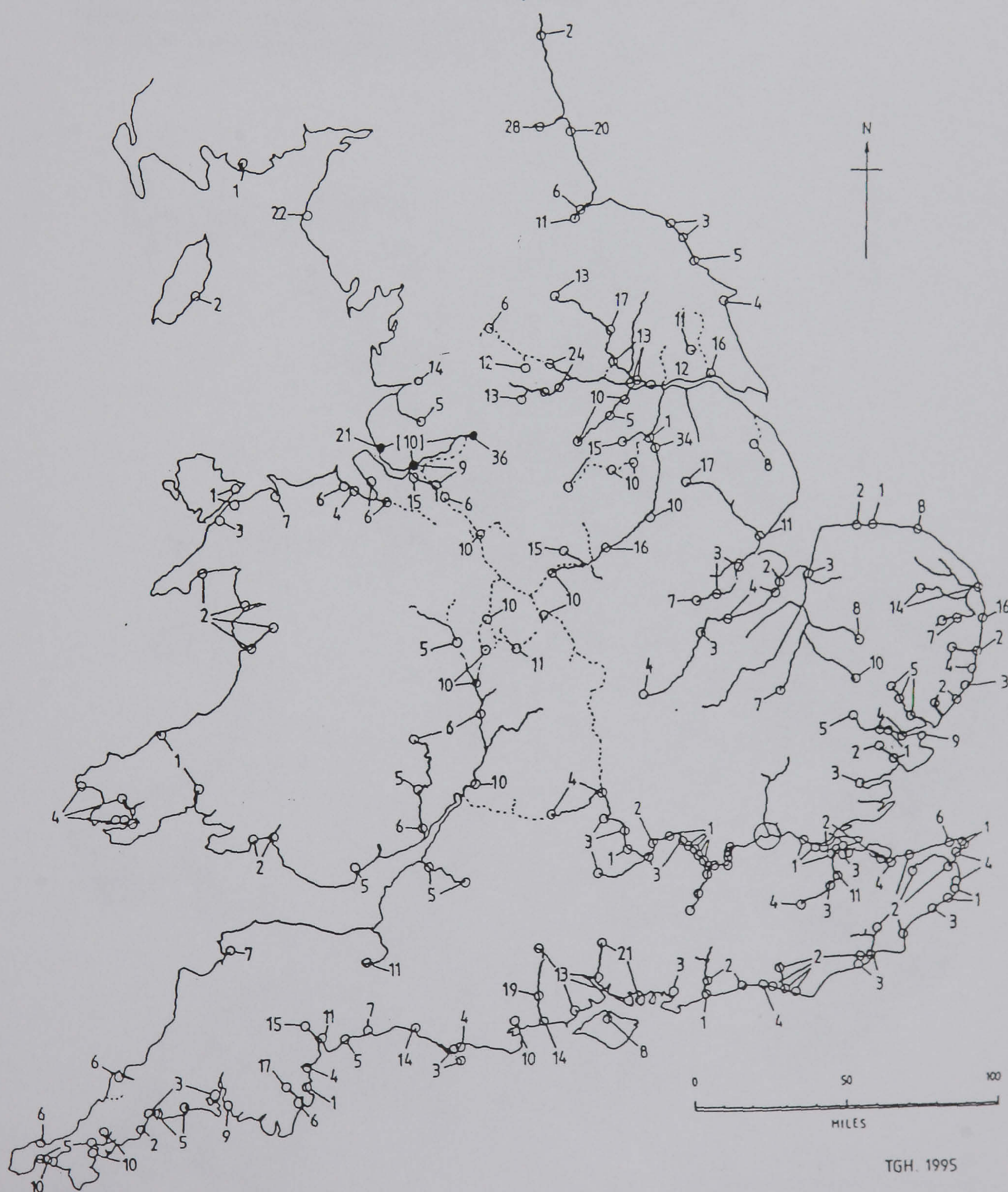




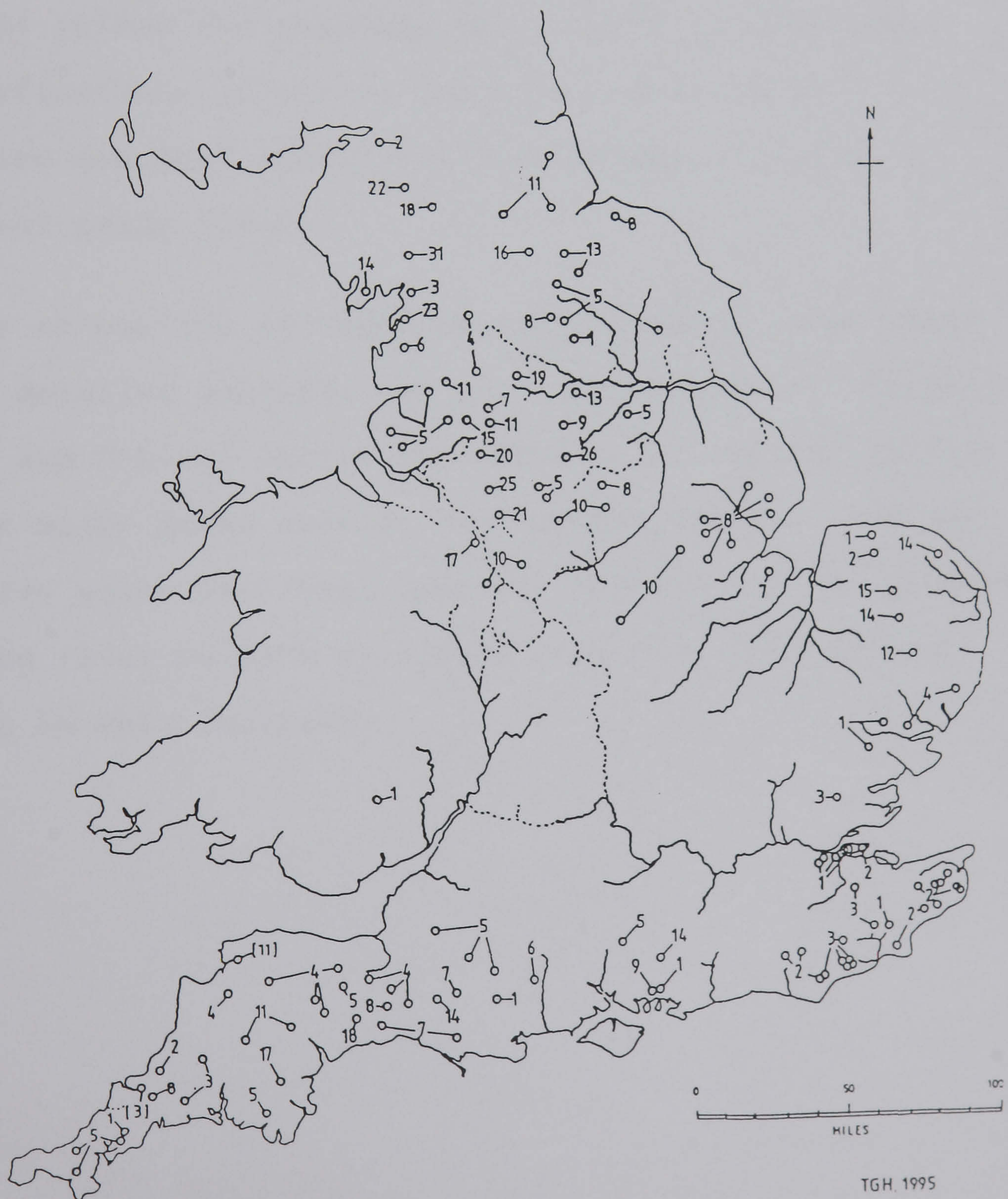
Figure 4.9

## INLAND DESTINATIONS OF VESSELS and BARGES

Ex London Wharves 1793 from The Universal British Directory

Numbers recorded for each destination not accessible by water.

[3] & [11] are coastal locations supplied over-land by south-coast vessels.





of river ports served the industrialised woollen towns of the West Riding of Yorkshire, with twenty four ships having Leeds as a destination. In Lancashire a similar concentration is seen around the river Mersey, an area of coal and salt mining as well as the developing cotton industry and also linking London with the foreign export and import trade conducted in the major port of Liverpool.

Concentrations of river ports also occurred in areas of agricultural specialisation. In East Anglia for example an important corn-growing area had developed. As Figure 4.9 shows a number of inland destinations were listed in this area. Inland destinations were also concentrated in south Lincolnshire and Kent which were both primary areas of agricultural production.

A note of caution is required when studying these three maps. The detailed analysis was only undertaken for the ports of London and Bristol whilst the entries for coastal vessels from other major ports such as Southampton and Hull and the many smaller ports have been ignored. Therefore a far greater coastal and river network of routes must have existed than that shown in this analysis.



## CHAPTER 5

### THE SHROPSHIRE AREA TOWNS AND THEIR CHANGING TRANSPORT NETWORKS IN THE NINETEENTH CENTURY.

At the beginning of the nineteenth century there were within the 'The Shropshire Area' (Figure 1.4, page 14). six major towns, Chester, Stafford, Shrewsbury, Birmingham, Worcester and Hereford and forty-five market towns.

During the period analysed in this, and the following chapter, 1818 to 1874, major changes took place in transport systems. These included the completion of the canal network, the final stages of the development of tramways and the construction of a new transport system - the railway. It is a period when the final improvements to roads were made by the turnpiking system, but it was a period in which the road-carrying network changed in a radical manner with a growing need to integrated further with the waterways and in particular with the railway, discussed in Chapter 6 below.

The hiatus between this period and that studied in previous chapters, is due to the limited nature of the sources for Shropshire between 1793 and 1818. Some provincial and national directories were published which continued to give details of carrier routes but nothing specific was published for the county. Where Shropshire area towns were listed, as for example in the Universal British Directory (1798), information was limited. The Universal British Directories for the counties of the Shropshire area listed 223 entries for carrier routes, of these, only 104 entries gave carrier's names, with seventy different carrier names listed. Many entries merely stated 'The Shrewsbury Waggon', 'The



Birmingham Cart' or 'Welsh Carriers'. Others stated 'Waggon' or 'Several Waggon's pass through' or 'Saturday's Waggon'.

In 1811 Holden's London and County Directory contained some data on carriers for the larger of the twenty-eight towns in the Shropshire Area. The lack of data in the period 1793-1818 may well have been the result of the uncertain economic climate caused by the Napoleonic wars. However, it has been demonstrated in chapter two, that the road networks were well developed by the end of the eighteenth century.

From 1818 a growing body of information on transport systems was published in an increasing number of national, provincial and locally produced directories. These included the regular production of the national directories of Wrightson, Pigot, Slater and the Post Office (Kelly), and the county publications such as, Parson and Bradshaw's New Directory of the county of Stafford (1818) and Tibnam's The Salop Directory (1828). The data contained in the nineteenth-century directories is very detailed and can therefore be treated with a reasonable degree of confidence. However, certain deficiencies were discovered when it was put under pressure.<sup>1</sup>

<sup>1</sup> From Pigot's Directory of Shropshire of 1822/3 to Slater's (late Pigot & Co.) Directory of Shropshire (1850) the entries were limited to market towns. From Bagshaw's Shropshire Directory of 1851 many directories, such as the series published by Edward Cassey or Frederick Kelly, gave details to parish level. There can be no doubt that the standards set in the directories of Pigot and Co., and Frederick Kelly had a bearing upon a standardized information for transport services. However the transport data contained in the directories produced by Robson and Co. in the 1840's was suspect and where possible Robson's data has been improved by cross reference to other works.



The building of a transport database of road-carrier data 1818-1874.

For the period 1818 to 1874, some 7,102 entries from forty-one trade directories were computerized, relating to all the towns for the Shropshire Area. For analysis, this overall period was divided into six roughly decennial sub-periods, constrained by the variety of publication dates of trade directories for different towns. The sub-periods used in the computer database are shown as Table 5.1 below, and will be referred to from henceforth by the sub-period title, i.e. the 1820's, 1830's 1840's etc. Due to variation in the number of directories, and the depth of data they contain, caution needs to be exercised when attempting to make direct comparisons between one sub-period and the next. However, valuable insights into the impact of a changing transport structure upon the road carrying fraternity can be extracted.

Table 5.1 The database of carrier entries in the Shropshire area directories in the period 1818-1874 in six sub-periods.

Period	Actual Period	No of Entries	No of Directories	No of Carriers
1820's	1818-23	721	6	243
1830's	1828-35	2004	6	573
1840's	1836-44	1121	6	454
1850's	1846-51	1001	7	517
1860's	1856-61	1160	8	543
1870's	1868-74	1098	9	537

The computerization of data allows for advanced analysis of trade directory entries, but certain problems such as that caused by intermittent recording have to be overcome. The problems with the data were:



1) **Carriers Names.** In some cases no name was given and an entry merely stated 'The London Waggon' or the 'Ludlow Cart'. Surname spelling varied both within the same directory and between different directories. In some cases surnames only were recorded, which caused a problem for names such as Jones and Williams. Christian names also varied or the wrong initials were printed.

2) **Carrier Firms.** By tracing carrier routes through time, it was possible to show that a business could at a later date be continued by a wife or son. In some cases it can be demonstrated that a single carrier entered into partnership with other family members or with other carriers which could lead to a change of name or the production of a company name, e.g. Parker Budd and Co. In other cases, it appeared that partnerships split, or two sons continued different parts of the original business as two different enterprises.

3) **Carrier Destinations.** The directory publishers used a variety of approaches to indicate the destination of carrier routes. Some stated the main destination, followed by a list of other towns visited en-route. Some gave multiple entries of destinations for the same carrier, which could be along a single route. Some gave only the final destination without indicating either the route or what other towns may have been served.

4) **Carrier Bases.** In the nineteenth century a variety of bases were used by carriers, apart from the traditional inn. In some large towns certain carriers used more than one base, and could call at both an inn and a warehouse or a canal wharf. When these were listed as separate entries there is a danger of counting more carriers than actually existed.

The value of creating a computer database for carrier entries over a fairly large area, is that routes were operated in both directions and through a number of places. Therefore most carriers can be identified at a number of points on his or her route, even if there was an error of recording in one particular place.

#### The computerization process and enhancement of the data.

The data from the Trade Directories was entered into six computer files (one for each sub-period as listed in Table 5.1) within fifteen basic fields of data. To these were added



four further fields for towns listed on the route followed by a particular carrier. Two further fields were added for:

a) Any additional data contained in an entry.

b) Mis-spelt carrier's names which had been corrected.

Additional fields were added for analysis and control purposes; for example every entry was given a sequential number as it was entered in the database. Sub-files were also created to cover specific tasks.

To overcome the problems of variable name spellings, a PIN was given to every carrier business. Where it was obvious that the business was continued by a family member, or as a partnership, the same PIN was kept throughout. The technique adopted to trace an individual carrier through the six sub-period files was achieved by giving PINs to carriers identified in the 1820's, merging and sorting that data with that from the 1830's and then the 1830's to 1840's etc. Care was taken to ensure that the given PIN covered the situation where a carrier appeared with different spellings.

For carriers with common names, there was difficulty in establishing who was who, especially if the entry merely said 'Jones'. However, because the data for many towns in the area was included every effort was made to check for a reciprocal entry and calculate the routes followed as a cross check before a PIN was allocated. There was a degree of subjective analysis in solving a few named routes, but overall the figures used in the analysis of the nineteenth century can be used with a reasonable degree of confidence.

Each carrier's business was coded within each period into the three classes, 'national', 'middling' and 'local'.



However, the class code is appropriate to each sub-period, which means that some carriers may have moved from being classed as 'national' in one period to becoming classed as 'middling' in the next, or vice-versa dependent upon the change in scale of their business.

An example of such a change in business is the firm of William Robins who in the 1820's operated on a carrier route from Droitwich to Worcester and was therefore classed as 'middling'. In the 1830's he was re-classified as 'national', in the 1840's and 1860's as 'middling' and in the 1850's and 1870's as 'local'.<sup>2</sup> A question can be raised: 'Do such changes in grading invalidate the analysis used in this thesis and thus the statistical tables which follow?' The answer is, 'No, because the grading has been applied to each carrier in each particular sub-period studied.' It is clear from the records that Robins was based in Worcestershire (probably in Inkberrow) and was a carrier who on his own would be classed as 'middling', although he eventually ended up as a 'local' carrier. During the late 1820's and 1830's, he apparently provided a feeder service to another carrier, and thus became part of a partnership. The partnership was with Wakeman and

<sup>2</sup> In the 1830's William Robins had formed partnerships and was recorded as Robins and Langford; Robins, Mills and Co.; or just Robins & Co.; and his routes extended from the Worcester area to Bristol in the south and Stone in the north and included routes into Stourbridge and Dudley in the Black Country. In the 1840's W. Robins' route was again listed as from Droitwich to Worcester and was thus classed as 'middling'. The name continued into the 1850's as Robins with a route which only linked the village of Inkberrow to Worcester and was thus classed as 'local'. In the 1860's however Robins linked a number of villages on the Worcestershire/Warwickshire border (Inkberrow, Claverdon and Lapworth) to both Worcester and to Birmingham and was thus re-classified as 'middling', but by the 1870's he was again a 'local' carrier linking the village of Claverdon to Birmingham.



Co. who during the 1820's and 1830's are shown with road carrying routes linking towns in Cheshire, Staffordshire, and Shropshire's eastern border, with Manchester, Sheffield and London. Through this partnership Robins also became involved with waterway transport, with canal routes from Chester, Liverpool and Manchester to London. In the waterway records for 1828 the partnership appears as Wakeman, Robins and Co. This analysis of the carrier Robins demonstrates how for brief periods a single carrier could act in partnership with others as well as showing how their classification could change through time.

In every trade directory used, it was possible to identify Robins by name although, as has been demonstrated, there was variation between entries. A small proportion of entries showed no carrier's name but merely a route. However, by using multi-field sorts and comparing data within and between the sub-periods it was possible to identify most un-named carriers, to correct spelling of surnames and add Christian names or initials. This example demonstrates how the PIN was used to identify particular carriers and their operations throughout the nineteenth century.

Once standardized data had been created, it was possible to analyse the data in a variety of ways and extract results which, without a computer database, would have been extremely time consuming or virtually impossible.

#### Road carriers, towns and villages in the Shropshire area.

In the Shropshire Area, data on carriers was recorded for fifty-nine towns and for some industrial villages that were



listed in directories from time to time. The latter included Bilston, Darlaston, Wednesbury and Willenhall, in the Black Country; Cannock on the Staffordshire coalfield; Ruabon located on the coalfield near Wrexham; and Dawley and Madeley on the Shropshire coalfield. Individual entries listed for Burslem, Hanley, Longton or Tunstall were included with entries for Stoke-on-Trent, as these were all part of the urban complex sometimes recorded as a destination under the broad term 'The Potteries', and which abutted upon the town of Newcastle-under-Lyme. The data listed for Ironbridge was merged with that of Broseley, because sometimes a carrier listed under Broseley was shown as operating from Ironbridge. Eventually, in the later directories, Ironbridge was given an entry of its own. In the later periods rural village entries became a feature of the directories, and in order to assess the numbers of local carrier routes as accurately as possible, these too were included in the database. They were cross-checked to the town, and in most cases appeared as a reciprocal entry, but some were not and were therefore added to the town.

Appendix 4 lists the names of the fifty-nine towns and the number of carrier entries against each town for each sub-period. Overall, there were 7,102 entries of which 6,767 (95%) related to the towns and 335 (5%) to industrial and rural villages. It will be noted that there is considerable variation in the number of entries for each sub-period, from 705 in the 1820's, to 1,932 in the 1830's. Therefore, to make a comparison between one period and the next, these figures have been re-cast as percentages of the total for each period and are shown in Table 5.2



Table 5.2

THE PERCENTAGE OF DIRECTORY ENTRIES IN THE SHROPSHIRE AREA  
FOR ROAD CARRIERS IN EACH TOWN DURING THE SIX PERIODS

TOWN	1820's	1830's	1840's	1850's	1860's	1870's	TOTAL	% TOTAL
BEWDLEY	0.28	0.88	0.83	0.54	0.90	0.20	45	0.66
BIRMINGHAM	35.32	29.50	16.33	11.87	8.11	19.69	1396	20.63
BISHOPS CASTLE	0.57	0.78	0.74	1.09	0.72	0.10	46	0.68
BREWOD	0.28	0.05	0.00	0.33	0.36	0.69	17	0.25
BRIDGNORTH	0.14	0.41	0.83	0.87	1.26	0.10	41	0.61
BROMSGROVE	1.28	0.62	1.20	0.98	1.53	2.15	82	1.21
BROMYARD	1.42	1.04	0.18	0.87	0.99	1.18	63	0.93
BROSELEY/IRONBRIDGE	0.43	0.62	1.11	0.54	0.18	0.10	35	0.52
CHESTER	5.53	4.04	4.43	8.93	2.61	4.51	322	4.76
CLEOBURY MORTIMER	0.00	0.41	0.55	0.22	0.63	0.29	26	0.38
CLUN	0.00	0.00	0.28	0.44	0.36	0.20	13	0.19
DRAYTON	0.43	0.83	1.38	0.87	0.27	0.00	45	0.66
DROITWICH	0.28	0.21	0.92	0.44	0.09	0.20	23	0.34
DUDLEY	0.14	0.93	0.83	0.44	0.36	0.20	38	0.56
ECCLESHALL	0.71	0.47	0.46	0.33	0.09	0.10	24	0.35
ELLESMERE	0.57	0.62	0.46	0.11	0.27	0.00	25	0.37
HALESOWEN	1.13	1.50	1.48	0.44	0.18	0.00	59	0.87
HEREFORD	1.70	2.02	1.38	5.56	6.40	7.44	264	3.90
KIDDERMINSTER	1.42	1.60	1.48	1.53	1.71	0.49	95	1.40
KINGTON	0.43	0.88	0.18	1.74	1.44	1.27	67	0.99
KNIGHTON	0.00	0.21	0.65	0.44	0.18	0.00	17	0.25
LEOMINSTER	0.85	1.86	1.20	2.61	1.26	4.11	135	1.99

Continued:



Table 5.2

THE PERCENTAGE OF DIRECTORY ENTRIES IN THE SHROPSHIRE AREA  
FOR ROAD CARRIERS IN EACH TOWN DURING THE SIX PERIODS

TOWN	1820's	1830's	1840's	1850's	1860's	1870's	TOTAL	% TOTAL
LLANFAIR	0.00	0.41	0.55	0.65	0.36	0.29	27	0.40
LLANFYLLIN	0.00	0.16	0.28	0.33	0.72	0.10	18	0.27
LLANGOLLEN	0.00	1.35	1.29	1.74	1.53	0.10	74	1.09
LUDLOW	0.85	2.17	3.04	2.29	1.08	2.15	136	2.01
MALPAS	0.00	0.00	0.00	0.54	0.09	0.88	15	0.22
MONTGOMERY	0.14	0.36	0.92	0.65	0.63	0.10	32	0.47
NANTWICH	1.13	0.67	1.38	2.61	0.00	0.39	64	0.95
NEWCASTLE	3.12	1.60	0.46	0.76	0.36	0.00	69	1.02
NEWPORT	1.13	1.40	0.92	0.33	0.00	0.00	48	0.71
NEWTOWN	0.43	1.24	1.38	2.07	2.61	0.20	92	1.36
OSWESTRY	0.43	0.72	1.48	2.83	4.95	3.43	149	2.20
PEMBRIDGE	0.00	0.05	0.00	0.44	0.45	0.69	17	0.25
PENKRIDGE	0.28	0.31	0.18	0.22	0.18	0.20	16	0.24
PRESTEIGN	0.00	0.10	0.46	0.33	0.18	0.10	13	0.19
RADNOR	0.00	0.05	0.37	0.44	0.27	0.00	12	0.18
RUGELEY	1.13	0.62	1.01	0.33	0.18	0.49	41	0.61
SANDBACH	0.57	0.57	0.55	0.76	0.27	0.20	33	0.49
SHIFNAL	0.43	0.98	1.11	1.74	0.00	0.00	50	0.74
SHREWSBURY	4.96	7.19	15.59	10.57	14.77	7.15	677	10.00
STAFFORD	2.70	1.60	0.74	2.72	1.17	1.47	111	1.64
STOKE ON TRENT	1.28	1.71	3.41	0.98	0.27	0.00	88	1.30
STONE	0.28	0.52	0.55	0.54	0.36	0.29	30	0.44

Continued:



Table 5.2

THE PERCENTAGE OF DIRECTORY ENTRIES IN THE SHROPSHIRE AREA  
FOR ROAD CARRIERS IN EACH TOWN DURING THE SIX PERIODS

TOWN	1820's	1830's	1840's	1850's	1860's	1870's	TOTAL	% TOTAL
STOURBRIDGE	5.82	1.97	1.85	0.76	0.45	0.49	116	1.71
STOURPORT	0.00	0.00	0.09	0.00	0.18	0.39	7	0.10
STRETTON	0.00	0.62	0.65	0.33	0.63	0.29	32	0.47
TARPORLEY	0.00	0.36	0.46	0.76	0.36	0.29	26	0.38
TENBURY	0.28	0.36	0.55	0.98	0.99	0.69	42	0.62
WALSALL	1.84	1.86	0.92	1.96	0.72	0.88	94	1.39
WELLINGTON	0.14	1.29	1.38	0.22	0.00	0.00	43	0.64
WELSHPOOL	0.00	1.19	1.66	2.07	2.25	0.10	86	1.27
WEM	0.43	0.36	0.37	0.33	0.54	0.00	23	0.34
WENLOCK	0.14	0.47	0.74	0.54	0.36	0.69	34	0.50
WEOBLEY	0.00	0.10	0.00	0.11	0.18	0.20	7	0.10
WHITCHURCH	0.71	0.88	1.01	0.65	0.81	0.29	51	0.75
WOLVERHAMPTON	8.23	4.76	5.44	6.21	6.13	6.76	403	5.96
WORCESTER	9.79	10.97	11.35	9.15	24.59	19.88	964	14.25
WREXHAM	0.85	1.50	0.92	0.87	1.44	7.84	149	2.20
TOTAL TOWNS LISTED	705	1932	1084	918	1107	1021	6767	
% OF OVERALL TOTAL	97.78	96.41	96.70	91.71	95.68	92.99	95.28	100
OVERALL TOTAL	721	2004	1121	1001	1157	1098	7102	



The change in percentage gives an insight into how the importance of road-carrying services to particular towns changed throughout the overall period. From Table 5.2 details were extracted for the seven highest ranking towns in each period, and these placed in rank order in Table 5.3. This showed that the town of Birmingham dominated from the 1820's to the 1850's but moved to third place in the 1860's and second place in the 1870's. Worcester, another important centre, held second place for 1820's and 1830's, third place for the 1840's and 1850's, becoming dominant for the last two sub-periods.

Throughout the overall period Wolverhampton and Chester appeared to decline in importance as centres for road carrying services. Shrewsbury however, rose from sixth place in the 1820's, to third place in the 1830's and held second place from the 1840's to the 1860's, dropping to fifth place in the 1870's. Therefore Table 5.3 demonstrates an apparent decline in the importance of road carrying for towns in the east of the area, and a rise in importance for the towns on the western fringe of the area. Both Shrewsbury and Hereford were important centres serving mid-Wales, but the borderland towns of Newtown, Wrexham and Oswestry gained in importance in the last three decades. It would appear therefore from this evidence that as alternative forms of transport (such as the railway) were developed in the east, so the importance of road-carrying centres moved westward.

An analysis of the number of destinations listed for each town was undertaken to ascertain the changing importance of



Table 5.3

RANK ORDER OF TOWNS WITH SEVEN HIGHEST PERCENTAGE OF CARRIER ENTRIES  
IN TRADE DIRECTORIES 1818 - 1874.

RANK ORDER	1820s	1830s	1840s	1850s	1860s	1870s
1	Birmingham	Birmingham	Birmingham	Birmingham	Worcester	Worcester
2	Worcester	Worcester	Shrewsbury	Shrewsbury	Shrewsbury	Birmingham
3	Wolves.	Shrewsbury	Worcester	Worcester	Birmingham	Wrexham
4	Stourbrg.	Wolves.	Wolves.	Chester	Hereford	Hereford
5	Chester	Chester	Chester	Wolves.	Wolves.	Shrewsbury
6	Shrewsbury	Ludlow	Stoke	Hereford	Oswestry	Wolves.
7	Newcastle	Leominster	Ludlow	Oswestry	Chester = Newtown =	Chester

Notes:

1) Wolves = Wolverhampton, Stourbrg = Stourbridge.

2) In the 1820's Hereford ranked 9th, Stoke 10th, Leominster, Ludlow and Wrexham 13th equal, Oswestry and Newtown 16th equal.



towns for providing carrying services. This showed that throughout the overall period there was variation in the listing of places from which carriers operated. Six major towns remained constant throughout the period and, as will be demonstrated below, became the dominant focus for road transport networks. The apparent status of the market towns as road-carrying centres varied throughout the period, and can be illustrated by considering the changing number of destinations (Table 5.4). Overall the number of towns listed rose from forty-five in the 1820's to fifty-eight in the 1850's and then fell to forty-eight by the 1870's.

Table 5.4 also shows that for road carriers, a high point of 896 listed destinations was reached in the 1830's. This was just before the railway network began to be developed throughout the area. There were however changes in the type of destination. In the earlier sub-periods many were on a country-wide scale and served by 'national' carriers, but by the end of the period of study most destinations were villages served from market towns by 'local' carriers.

This table does however, give a general picture of the changes to the road-carrying network throughout the period and how it may have affected town economies. Birmingham, for example, remained a dominant centre listing two-hundred and fifty destinations in the 1830's, but falling to one-hundred and six destinations by the 1870's. Worcester however shows a rise in destinations from ninety-nine in the 1830's to one-hundred and eight in the 1870's, but because many of these were local carriers serving village communities caution must be exercised in reading too much into such apparent trends. A



Table 5.4

SHROPSHIRE AREA - NUMBER OF DESTINATIONS LISTED FOR EACH TOWN

TOWN NAME	1820's	1830's	1840's	1850's	1860's	1870's
BEWDLEY	5	5	4	3	6	3
BIRMINGHAM	115	250	116	76	80	106
BISHOPS CASTLE	4	5	2	4	5	1
BREWOOD	1	1		1	1	1
BRIDGNORTH	6	12	5	7	10	1
BROMSGROVE	19	3	4	5	14	19
BROMYARD	6	7	2	6	4	4
BROSELEY/IRONBRIDGE	3	8	10	4	2	1
CHESTER	37	50	60	45	24	31
CHURCH STRETTON		2	2	2	4	3
CLEOBURY MORTIMER	2	3	6	2	4	3
CLUN			3	2	2	2
DRAYTON (MARKET)	3	9	8	9	3	
DROITWICH	1	4	3	3	1	2
DUDLEY	1	11	7	3	3	3
ECCLESHALL	4	5	5	3	1	1
ELLESMERE	3	7	6	1	3	
HALESOWEN	5	6	5	3	2	
HEREFORD	15	24	28	45	48	50
KIDDERMINSTER	6	10	10	9	10	6
KINGTON	3	10	8	19	9	7
KNIGHTON		4	7	5	2	
LEOMINSTER	10	19	39	10	10	13
LLANFAIR		4	4	4	1	1
LLANFYLLIN		2	2	2	1	1
LLANGOLLEN		9	10	10	10	1
LUDLOW	10	19	28	21	12	17
MALPAS				3	1	3
MONTGOMERY	1	2	3	3	3	1
NANTWICH	7	6	16	16		10
NEWCASTLE-UNDER-LYME	20	22	5	5	4	
NEWPORT	9	10	11	3		
NEWTOWN	2	10	8	11	9	2
OSWESTRY	2	8	11	17	25	29
PEMBRIDGE		3		3	4	4
PENKRIDGE	2	2	2	2	2	2
PRESTEIGN			4	3	2	1
RADNOR		1	3	3	3	
RUGELEY	9	4	5	3	2	6
SANDBACH	5	7	8	5	2	2
SHIFNAL	2	5	5	5		
SHREWSBURY	32	58	88	72	81	62
STAFFORD	10	20	8	21	15	14
STOKE-ON-TRENT	9	11	21	7	2	
STONE	2	7	7	4	3	3
STOURBRIDGE	17	24	12	7	5	4
STOURPORT		5	1		2	2
TARPORLEY		5	3	3	2	2
TENBURY	2	5	6	6	5	7
WALSALL	8	11	3	7	5	4
WELLINGTON	1	7	7	3		
WELSHPOOL		11	8	9	9	1
WEM	4	4	2	2	4	
WENLOCK (MUCH)	1	4	3	4	2	7
WEOBLEY		1		1	1	6
WHITCHURCH	5	9	6	5	7	3
WOLVERHAMPTON	36	35	25	31	35	40
WORCESTER	49	99	61	63	128	108
WREXHAM	2	11	17	8	10	31
TOTAL TOWNS	45	56	55	58	55	48
TOTAL DESTINATIONS	496	896	743	639	645	631



dramatic change is shown for Newcastle-under-Lyme and Stoke-on-Trent, with a movement of carriers from the former to the latter as the prime centre. However, both centres declined with only two road carriers listed by the 1860's and none by the 1870's. Small towns such as Newport, Wellington and Shifnal appear to have declined as places with a carrying function, having no road-carrier destinations listed for the later decades.

It has already been argued that, as the eighteenth century progressed, so the recording of data improved and gradually a more balanced picture of road-carrying networks emerged. In the nineteenth century, whilst there were signs of improved recording from the 1820's to the 1830's, thereafter the recording of data for road carriers became fairly consistent, although the data for waterway carriers became uncertain.

To interpret the variability of destinations recorded in Table 5.2 the changing pattern of carrier services had to be addressed. The figures in Table 5.5 showed that in the period of study the number of 'national' road-carrier services reached a high point in the 1830's and then declined rapidly. The number of 'middling' carriers rose to a high point in the 1840's and although they began to decline they appeared to continue as a valuable service linking market towns together. By the end of the period it was the 'local' carriers which had become the dominant group, with sixty-seven percent of all directory entries listing carriers of this class.

This change in pattern indicated that the railway and canal networks had superseded the long-distance road services,



Table 5.5

The changing pattern in the classification of carriers in the Shropshire area 1818 - 1874. Number of carriers by sub-period.

Sub-period	National		Middling		Local	
	No	%	No	%	No	%
1820's	39	16	167	69	37	15
1830's	44	8	364	64	165	29
1840's	23	5	306	67	125	28
1850's	6	1	288	56	223	43
1860's	2		235	43	304	56
1870's	2		177	33	358	67

but that 'middling' and 'local' services were extended to serve both market towns, industrial villages and places which had a station or wharf on the railway or canal networks.

The classification of road-carriers raised problems, for it would appear that some, like the carrier Robins discussed on pages 214-215 above, may be classed as 'middling' from the data available on their road-carrying routes, but were in fact extending their routes by connection to waterway carriers. It is therefore considered, that overall Robins himself was never more than a 'middling' carrier, but that he acted as a local agent in the Droitwich area for wider carrying services such as that provided by Wakeman and Co.

To study the implications of joint road and waterway carriers in the nineteenth century a database of 1,133 entries of waterway and canal operators was also created. In this database a carrier called Clay, Newman and Co. was listed in 1835 as running a water-way service once a week to Droitwich and a twice a week to Bristol. Because the carrier Robins did.



in the 1830's, show Bristol via Tewkesbury as a destination, it is suggested that he may have acted as agent for this company as well as Wakeman & Co. By 1835 the Droitwich Canal (which had opened to the River Severn in 1771) had also been linked to the Worcester and Birmingham Canal. However it is noted that Clay, Newman and Co. did not operate from Diglis or Lowesmore wharfs in Worcester (which were on the Worcester and Birmingham Canal), but from the Quay on the river Severn and this suggests that they operated river boats rather than canal barges.

Another example of partnerships which covered different areas of the country is contained in Wrightson's Directory for Birmingham (1818) in which the entry for the road carrier Goadsby & Co. stated that he conveyed goods to 'Hunts Warehouse, Eyre St, Sheffield, from whence goods were forwarded by Ridsdale and Co., to Barnsley, Wakefield, Leeds, Huddersfield, Halifax. Bradford, Hull, and by other respectable Carriers to Pontefract, Doncaster, York and all parts of the north, etc.'<sup>3</sup> These examples demonstrated how the assessment of a carrier's business potential and thus their classification is a complex procedure. In view of the discussion above, two road carriers were classed as 'national' in both the 1860's and 1870's and shown as such in Table 5.5.

In the 1860's one of the 'national' carriers was Pickford who by this time not only operated canal barges but was also an agent for the railway. The other 'national' carrier was R. T. Smith and Co. of Hereford who was apparently based in

<sup>3</sup> Wrightson's New Triennial Directory of Birmingham (1818), p. 189.



Broad St., but was also shown as operating from Barr's Court Station. This business appeared to have still been using some road transport, and Slater's Directory of Herefordshire (1859) also comments:

'R. T. SMITH & CO. general carriers and forwarding agents, convey goods to all parts of Gloucestershire, Herefordshire, Monmouthshire, and South Wales, and agents to the Great Western Railway, office Broad St - Thomas S. Farmer, agent.'

By the time of the Post Office Directory for Worcester (1862) R. T. Smith & Co. were acting as agents for the Great Western Railway goods depot at 56 Foregate St, Worcester, but their name no longer appeared in the list of road carriers.

In the 1870's one of the two national carriers listed in Table 5.5 was Sutton and Co. who provided a parcels service from Worcester to London. However, like the entry for R. T. Smith and Co. of Hereford they were also agents for the Great Western Railway and operated from New St., Worcester. The other was Danks and Co. who were listed in the Post Office Directory (1868) as a road carrier in Kidderminster and were classified as a 'national' carrier on the basis that they operated an occasional service to Bristol. However, the waterway database showed that Danks and Co. were primarily waterway carriers, and therefore this entry under the road carriers could be an error. The name Danks was traced back to the 1820's when a John Danks ran an extensive waterway-carrying network which linked Birmingham to Shropshire, Cheshire, Lancashire, Yorkshire and Nottinghamshire as well as south to Worcester and Bristol. From the 1830's the business appeared to become Danks, Venn & Co., from 1860's Danks, Venn and Sanders, and from the 1870's Danks and Sanders.



The analysis of carrier services, among whom there was a constant variation of name, demonstrated how difficult it was to sort by name only. It showed therefore the value of giving each identified business a PIN before undertaking further analysis.

Continuity of road carriers between sub-periods.

The use of a PIN to identify each carrier business allowed an assessment to be made of the number of new carriers entering the trade, and the numbers who continued in business from one period to the next. In Table 5.6, by studying the table from top to bottom the figures in the right-hand box for each period show the number of new firms entering the road-carrying trade in each period. Between the periods 1820's and 1830's 19 (43%) new 'national', 277 (76%) new 'middling', and 143 (87%) new 'local' carriers appeared. In the period 1830's to 1840's the high figures continued for the 'middling' 152 (50%) and 'local' 80 (64%) carriers but for the 'national' carriers only 6 (26%) new firms entered the market. This was due no doubt to the emergence of the railway as is discussed below. The replacement of existing carrier firms by new firms continued however for the 'middling' and 'local' carriers. Between 1840's to 1850's 194 (67%) new 'middling' carriers and 187 (84%) new 'local' carriers appeared and as the table demonstrated this replacement trend continued throughout the final two periods.

A study of the other boxes for each period in Table 5.6, shows how many carriers continued from one period to the next. Reading down column 1 for the 1820's shows that 23% continued



Table 5.6

ROAD-CARRIERS IN THE SHROPSHIRE AREA - ANALYSIS OF BUSINESS CONTINUITY BETWEEN PERIODS  
Showing the number and percentage of carriers by class who continued to operate from period to period.

PERIOD	CLASS OF CARRIER	TOTAL NUMBER OF CARRIERS	NUMBER FROM 1820's	NUMBER FROM 1830's	NUMBER FROM 1840's	NUMBER FROM 1850's	NUMBER FROM 1860's	NUMBER FROM 1870's
1820's	National	39	39 (100%)					
	Middling	167	167 (100%)					
	Local	37	37 (100%)					
	Total	243	243 (100%)					
1830's	National	44	25 (57%)	19 (43%)				
	Middling	364	87 (24%)	277 (76%)				
	Local	165	22 (13%)	143 (87%)				
	Total	573	134 (23%)	439 (77%)				
1840's	National	23	10 (43%)	7 (30%)	6 (26%)			
	Middling	306	46 (15%)	108 (35%)	152 (50%)			
	Local	125	12 (9%)	33 (26%)	80 (64%)			
	Total	454	68 (15%)	148 (33%)	238 (52%)			
1850's	National	6	3 (50%)	1 (17%)	2 (33%)	0		
	Middling	288	14 (5%)	39 (14%)	41 (14%)	194 (67%)		
	Local	223	7 (3%)	8 (4%)	21 (9%)	187 (84%)		
	Total	517	24 (5%)	48 (9%)	64 (12%)	381 (74%)		
1860's	National	2	1 (50%)	0 (0%)	0 (0%)	1 (50%)	0 (0%)	
	Middling	235	6 (3%)	12 (5%)	16 (7%)	65 (27%)	136 (58%)	
	Local	304	4 (1%)	2 (1%)	6 (2%)	78 (26%)	214 (70%)	
	Total	541	11 (2%)	14 (3%)	22 (4%)	144 (27%)	350 (65%)	
1870's	National	2	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (100%)
	Middling	177	4 (2%)	6 (3%)	10 (6%)	21 (12%)	58 (33%)	78 (44%)
	Local	358	3 (1%)	2 (1%)	8 (2%)	48 (13%)	86 (25%)	209 (58%)
	Total	537	7 (1%)	8 (1%)	18 (3%)	69 (13%)	146 (27%)	289 (54%)



into the 1830's, 15% to 1840's, 5% to the 1850's, 2% to the 1860's, and seven carriers (1%) had been in operation from the 1820's right through to the 1870's. Of the latter four were 'middling' carriers and three were 'local' carriers.

A clearer picture emerged when these figures were recast as Table 5.7. It can be seen that in spite of the falling numbers of 'national' carriers from thirty-nine in the 1820's to only one in the 1860's, there was some strong continuity of particular firms. For the 'middling' and 'local' carriers the table demonstrated that, in spite of new firms entering the transport market in all periods, persistence of trading was also a feature of this type of trade. Of the two classes it was the 'local' carriers, with 3 carriers (8%) who had become established by the 1820's, who demonstrated the strongest persistence rate throughout the entire period.

Table 5.7

Continuity of carriers by class from the 1820's to the 1870's.

Period	National	Middling	Local
1820's	39 (100%)	167 (100%)	37 (100%)
1830's	25 (64%)	87 (52%)	22 (59%)
1840's	10 (25%)	46 (27%)	12 (32%)
1850's	3 (8%)	14 (8%)	7 (19%)
1860's	1 (3%)	6 (4%)	4 (11%)
1870's	0	4 (2%)	3 (8%)



Road and waterway carrier bases - the development of the warehouse.

As has been shown in Chapter 2, the London base used by carriers was the Inn. It became a tradition for innkeepers to use their inns as warehouses, and as places for the storage of goods prior to transport. The inns also provided a base for the collection of excise duty payable on a range of marketable goods during much of the eighteenth century. Smith comments, that from the seventeenth century the collectors of excise went on their 'rounds' eight times a year, and 'they held "sitting days" at each of the market towns when the sittings were held in the Excise Office, which was almost always an inn. The innkeeper was called the office keeper.'<sup>4</sup>

At inland and coastal ports 'Customs-men' controlled any duty on the shipment of goods in and out of the country at quay-side warehouses. As Hey indicates, as early as the mid-sixteenth century the sixth Earl of Shrewsbury had built a warehouse at the inland port of Bawtry in which to store lead from his mines, as well as imposing wharfage tolls on other persons using the port.<sup>5</sup> From the early 1700's the concept of warehousing imported goods prior to the payment of import duties began to emerge, with pepper (1714), rum (1742) and sugar (1766), and 'bonded warehouses' were built for tobacco and wine. By the beginning of the nineteenth century the warehousing system came under government control with the passing in 1833 of the 'Act for Warehousing of Goods'.<sup>6</sup>

<sup>4</sup> G. Smith, Something to Declare (1980), p. 28.

<sup>5</sup> D. Hey, Packman Carriers and Packhorse Roads (1980), pp. 109-110.

<sup>6</sup> The Warehousing of Goods Act, 3 & 4 William 4, c. 57. referred to in J. R. McCulloch, A Dictionary of Commerce and Commercial navigation (1839), pp. 1219 ff.



Alongside this development of warehousing at ports and quays, manufacturers too built warehouses from which their goods could be distributed to retail outlets.

Innkeepers and warehouse owners were therefore an important part of the transport network. In the larger centres, an inn-warehouse might be leased by one carrier or a group of carriers who could afford to employ a permanent warehouseman. From the late eighteenth century there was evidence that in addition to the inn-warehouses some carriers were building their own warehouses.

The nineteenth-century trade directories used in this thesis listed a variety of bases used by road carriers, including inns, warehouses, wharfs on rivers and canals, newspaper offices and railway stations. In some towns traders relied on common knowledge of a carrier's base because some directory entries only showed a street name or no particular place. For much of the overall period the small towns of Eccleshall, Knighton, Cleobury Mortimer, Droitwich, Penkridge and Rugeley did not list any addresses. As the three latter towns were on canals it can be assumed that the carriers called at the canal wharf. In addition to the type of addresses mentioned above, some carriers were based at their 'Own House', which for larger carriers can be interpreted as 'own warehouse' but for smaller local carriers does appear to be their place of abode.

#### An analysis of carrier-bases in the Shropshire area.

Because of the incomplete nature of the information given in some directories it was necessary to compare data



on individual carriers across time and by reference to street maps, lists of inns and wharfs to clearly identify their base. For example, carriers could be listed for an address or street name in one town directory, but in a different directory they could be listed as operating from an inn. However, by using maps to check the location of the inn it was usually found to be in the street mentioned in the other directory, and was therefore the same location. In such cases the inn was used in the following analysis. In a few cases a subjective decision had to be made on the category of a carrier's base and for some no base was established. Once the road carriers' bases were established to a reasonable degree of confidence they were analysed as the number of entries and the number of places in each period under six headings: Inns, an Address or Street, a House, a Warehouse or Wharf, an Office, or a Railway Station (Table 5.8).<sup>7</sup>

Table 5.8 shows that the greatest lack of data was in the 1820's when it was virtually impossible to consult earlier directories, and in 8% of cases no address could be established. It shows that in the 1820's there were 365 separate entries for carriers calling at 106 different inns. The proportion of inns providing a carrier base rose steadily throughout the period from 51% in the 1820's to 86% in the 1870's. The number of inns providing carrier bases also rose from 106 in the 1820's to 258 in the 1860's although a reduction in numbers to 214 occurred in the 1870's. Therefore the inn continued as a base used by many road carriers throughout the entire period. This continuity did not happen

<sup>7</sup> The category 'a house' was only applied to small carriers where the address was assumed to be their private residence.



Table 5.8

TOWNS OF THE SHROPSHIRE AREA - PERIODIC CHANGE IN THE TYPES OF ROAD-CARRIER BASES IN THE AREA.

PERIOD	DIRECTORY ENTRIES & BASES	INNS		ADDRESS OR STREET		OWN HOUSE		WAREHOUSE OR WHARF		OFFICE		RAILWAY STATION		NO PLACE MENTIONED		TOTAL
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
1820's	ENTRIES BASES	365	51	37	5	6	1	245	35	2	0.3	0	0.0	55	8	710
		106	55	20	10	4	2	62	32	1	0.5	0	0.0			193
1830's	ENTRIES BASES	978	50	111	6	131	7	642	33	1	0.1	0	0.0	74	4	1,937
		291	57	62	12	65	13	89	18	1	0.2	0	0.0			508
1840's	ENTRIES BASES	538	50	62	6	102	9	293	27	33	3.0	0	0.0	56	5	1,084
		210	58	37	10	60	16	56	15	2	0.6	0	0.0			365
1850's	ENTRIES BASES	654	71	68	7	62	7	110	12	9	1.0	0	0.0	14	2	917
		233	68	43	12	38	11	28	8	3	0.9	0	0.0			345
1860's	ENTRIES BASES	915	83	32	3	58	5	46	4	0	0.0	14	1.3	37	3	1,102
		258	78	19	6	31	9	14	4	0	0.0	9	2.7			331
1870's	ENTRIES BASES	875	86	36	4	26	3	31	3	0	0.0	4	0.4	41	4	1,013
		214	81	23	9	16	6	9	3	0	0.0	2	0.8			264



for the coaching trade where the economy of small towns could be devastated by a sudden loss of trade, due in part to coaching inns losing their function when the railway was established. <sup>8</sup>

The warehouses listed are primarily those owned by road carriers such as John Jolly, to which have been added wharfs which were operated by carriers who operated on both roads and waterways, such as Pickford and Crowley Hicklin and Co. The number of warehouses and wharfs reached a peak in the 1830's when 89 were listed, but the numbers declined to 31 in the 1870's. The proportion of warehouses was highest at 32% in the 1820's falling to 18% in the 1830s and to 15% in the 1840's followed by a subsequent dramatic drop in percentage to 3% in the 1870's. This fall-off in both numbers and percentages was due to the development of the railway, and the resulting decline of the long-distance road-carrying services and also the combination of road and waterway services provided by 'national' carriers such as those mentioned above.

Although the railway was being developed in the Shropshire area from the 1840's, it is not until the 1860's that there was direct evidence of a railway station being used as a base for road-carrying services. Even then, only 14 entries at 9 locations list a railway station, and this was very short-lived for by the 1870's this falls to 4 entries. This was a surprising result as it was expected that the rise in local road-carrying services would have shown the railway station as a base, whereas as has already been shown it was the number of

<sup>8</sup> T. G. Hill 'The trading community of Shifnal and its geographical and genealogical linkages - 1841-61' (unpub. MA dissertation, Department of English Local History, Leicester University, 1988-9).



inns which increased with the rise of localized services. It would appear that as long as a station was mentioned in the text of a trade directory, or a page used for a railway timetable (Figure 5.1), it was assumed that local carrying services would use it as a base. Another factor was that the railway companies placed full-page adverts at the back of some directories advertising their service to the entire area rather than stating their presence in a particular town (Figure 5.2).

It has been noted above that some carriers rented warehouse premises at inns. It is possible that the carriers who appeared in the records for only a short period, and with an address as a base, could have rented an inn warehouse. However, by cross-reference between sources this possibility was largely disproved. For example, in Birmingham the carrier Joseph Butler (who linked Birmingham with Lichfield, Ashbourne and Stoke-on-Trent) was listed in the 1820's and 1830's as operating from no. 88 Coleshill Street. A check for Coleshill St. in the 1835 directory revealed four inns, with their street numbers, the Green Man (no. 36), the Angel (no. 63), the Black Lion (no. 82) and the Lichfield Tavern (no. 110). It would seem therefore that when a specific address was given, that it was more likely to be a warehouse than an inn.

Another difficult series of entries were those for Sarah Tombs, who linked Shrewsbury to Chester, Wolverhampton and Birmingham. In the 1820's she was listed as operating at the Bear Yard, Bull Street, Birmingham but in the 1830's as from the Bell Yard, Bull Street, both suggesting the site of an inn. Again a check was made to the 1835 directory, and at



Figure 5.1



RAILWAY TRAVELLING.

GRAND JUNCTION RAILWAY.

TIMES OF DEPARTURE FROM LIVERPOOL AND MANCHESTER TO BIRMINGHAM.

3 30. a. m. First Class, joins London Train at 8 30 a. m.	
6 a. m. Mixed,	12
8 15. a. m. First Class,	" "
10 30. a. m. First Class,	1 15 p. m.
12 15. p. m. First Class,	4 p. m.
4 p. m. Mixed,	6 p. m.
7 p. m. First Class,	" "
	12

FROM BIRMINGHAM TO LIVERPOOL AND MANCHESTER.

2 15, a. m. First Class, meets N. Union Train to Preston at Parkside.	
6 a. m. Mixed Train, do.	do.
11 30, a. m. First Class.	do.
2 15, p. m. First Class.	
2 45, p. m. First Class, meets N. Union Train to Preston at Parkside.	

3 30, p. m. Mixed.
6 p. m. First Class.

On Sunday the Departures will be.

3 30, a. m. First Class joins London Train at 8 30, a. m.	
8 15, a. m. Mixed,	" "
10 30, a. m. "	1 30, p. m.
7 p. m. "	" "
2 15, a. m. First Class	12
7 30, a. m. Mixed.	
11 30, a. m. "	
2 45, p. m. "	

The Trains, on Sundays, stops at First Class Stations only.

RAILWAY TIMETABLE FROM  
CHESTER GENERAL DIRECTORY 1840

Figure 5.2

THE  
LONDON AND NORTH WESTERN  
RAILWAY COMPANY,

Respectfully inform the Public that they

CONVEY GOODS

FROM

LONDON, LIVERPOOL, BIRMINGHAM, WOLVERHAMPTON, MANCHESTER, AND LEEDS;

To (with very few exceptions), all Goods Stations in

ENGLAND, SCOTLAND AND WALES.

They have Ten Trains, *daily*, between Liverpool and Manchester—Three between London, Birmingham, Wolverhampton, and Liverpool—Three between Leeds and Liverpool—Six between Preston and Liverpool (for North goods)—and Two between Bolton and Liverpool.

Goods delivered at the principal Stations before 6 o'Clock, p.m. will (generally), be ready for Delivery at destination the following day.

The Company have Two Deliveries, daily, at Liverpool, and their Warehouses are commodious and good. Every facility is afforded for the prompt receipt and delivery of goods at all the Company's Stations.

Particulars as to Rates, &c., can be obtained on application to

W. CAWKWELL,  
GENERAL MANAGER,

Or to the Company's Goods Managers, at London, Liverpool, Birmingham, Wolverhampton and Manchester.

RAILWAY ADVERTISEMENT FROM  
SLATERS DIRECTORY 1860



that time there was no Bear inn listed and any inns called the Bell were not located in Bull Street. However, earlier Birmingham directories up to 1781 listed both a Bear Inn and a Bell Inn located in Bull St. and so it would appear that what was once an inn-warehouse was then occupied by a carrier, and that the innkeeping function had ceased. Sarah Tombs also acted as an agent for Pickford whose Birmingham warehouse was situated at Warwick Junction Wharf on the canal in Fazeley Street, less than half a mile from Bull Street. On the evidence, such bases have been listed as warehouses and not as inns. Another problem was that some carriers picked up goods from more than one location such as a wharf and an inn, in such cases each pick-up point has been counted.

#### The eighteenth century background to carriers' warehouses.

The development of warehouses can be traced back to the middle of the eighteenth century. Sketchley's Birmingham Directory (1767) listed most carrier-bases as inns but commented that a number of carriers called at 'a warehouse in St Martin's Lane'. It also records that a 'national' carrier called Webster (for route see Figure 3.3, p. 145) called at 'Mrs Shackles, Moor St.', but by 1774 Webster operated from an inn, 'The George' in Digbeth.<sup>9</sup> There appeared to be no further mention of the name Shackle until 1829 when a carrier called John Shackle operated from his own warehouse at 52 Dale End. In 1781 the Birmingham directory made a brief mention of carriers who called at 'a Warehouse near the New Church Yard'

<sup>9</sup> Sketchley's Birmingham, Wolverhampton and Walsall Directory (1767); M. Swinney, The New Birmingham Directory and Gentleman and Tradesman's Compleat Memorandum Book (1774).



but gave no further detail of its location.<sup>10</sup>

By 1818 a number of carrier-owned warehouses can be identified in Birmingham. John & William Ashmore, in 1781, worked from an inn called 'The Spread Eagle' but by 1818 they had their own warehouse in Edgbaston St. and their waggon routes ran from Bristol to Sheffield. Another 'national' carrier who owned a number of warehouses was Crowley & Co., some of which were located at canal or riverside wharfs. This company's routes linked Birmingham and Shrewsbury with Bristol, Sheffield, London, Liverpool and Manchester (see Figure 5.5 page 267 below). The 1818 directory states that this company operated from Crescent Wharf in Birmingham, Union and Commercial wharfs in Wolverhampton, a warehouse (late Lowes) near the Welsh Bridge in Shrewsbury, the wharf in Oxford, Bridge Wharf No. 20 Harrow Road, Paddington and 'The Salisbury Arms', Cow lane, Smithfield in the city of London. By cross reference to the section entitled 'Canal Conveyance' it was made clear that the waggons operated by Crowley & Co. were linked to their ancillary business as canal-carriers. By contrast John Jolly who owned a warehouse in Bromsgrove St. only used waggons for his routes to London, Southampton and the South of England. The entry for this carrier suggests that he also owned a warehouse at 13 Aldersgate St, London and also called at the Green Man & Still in Oxford St.<sup>11</sup>

Apart from the important entrepot of Birmingham, carrier warehouses were also appearing in other provincial towns such

<sup>10</sup> Pearson & Rollason, The Birmingham, Wolverhampton, Dudley, Bilston and Willenhall Directory (1781)

<sup>11</sup> Wrightson's New Triennial Directory of Birmingham (1818), pp. 187- 197.



as Shrewsbury and Worcester. In 1793 the Shrewsbury Guide & Directory stated that 'The London Waggon set out from Mr. Powell's warehouse.'; and T Minshull's Shrewsbury Visitors Guide of 1786 stated that the 'London Waggon goes from Mr. Powell's in Mardol on Monday and Wednesday morning.' These cryptic comments suggest that the Shrewsbury carrier of the 1780's, Bather & Powell had their own premises (see pages 66-67 above).

In Worcester, although no specific mention is made of 'a warehouse' in directories dating from 1790 to 1794 there were references to the main carriers, including Goulding and West who connected Worcester to London, calling at Angel St.<sup>12</sup> Further research revealed that warehouses were built in Angel St. (see p. 260 below).

### Carrier's warehouses in the nineteenth century

By 1801 carriers appear to have been building their own warehouses in quite small towns. For example in Ludlow there was a warehouse owned by a carrier called Taylor in Corve St., and by 1811 there were two carrier warehouses in this street, one owned by Roberts and the other by Maxon.<sup>13</sup> By 1822 Pigot's Shropshire Directory indicated that Maxon, (who from 1804 had also owned a warehouse in Shrewsbury), was still operating from his Ludlow warehouse and that the other was run by a partnership of Roberts & Clewer, who also owned a warehouse in Worcester. In Shrewsbury in the 1820's John

<sup>12</sup> Worcester Royal Directory (1790); Universal British Directory (1793); The Worcester Royal Directory (1794).

<sup>13</sup> J. Price, The Ludlow Guide (1801) and W. Felton, A Description of the Town of Ludlow (1811).



Jolly, mentioned above, used the warehouse run by John Maxon but by the late 1820's both Maxon and Roberts & Clewer appear to have had their business taken-over by John Jolly whose routes covered all the destinations they had served. John Jolly developed warehouses in a number of places; in addition to the warehouses he used in Birmingham, Shrewsbury and Ludlow he owned warehouses in Kidderminster, Leominster and, what may have been his main base, Angel St., in Worcester.

The importance of John Jolly as a carrier of Worcester was shown in a government enquiry of 1833 into road surfaces and the width and shape of carriage and waggon wheels. Evidence was given to a governmental committee by a Mr. J. A. Stokes who had experimented with various road surfaces and types of wheel in Worcestershire. The Journal of the House of Lords records that John Jolly, was a 'great carrier between Worcester and London', and some interesting sidelights into his warehouse operations are also gained:

'I think it is about Ten Years ago since a Nine-inch Waggon made in the perfect way I wished it, was put into Jolly's hands to be loaded with his goods: it was loaded at Worcester, and brought up with the intention of showing it to the Committee of the House of Commons; but the Nobleman with whom I communicated upon the Subject was engaged that Day that it was in London, and Jolly, without my knowledge, had ordered it out of Town with another load before I was aware of it; it passed through the hands of Nine of his Waggoners with the unqualified Approbation; they said there was never a Waggon ran better. As a Proof that the Waggoners had no Unwillingness to make use of it, - it was put into the Waggon Warehouse at Worcester; I was to be at the expense of sending for it there and back; I did not send for it for a Fortnight; during that Fortnight, there being other Waggon in the Warehouse, the Waggoner took it Three Times to Kidderminster in preference to the other Waggon.' <sup>14</sup>

<sup>14</sup> Journal of the House of Lords, 65, Appendix No 1 (1833) p. 688 . A description of the debate on the wide-wheel experiments is contained in W. T. Jackman, The Development of Transportation in Modern England (1916, 1966 edn.) pp 227-230 and 261-263.



The report of this enquiry confirmed the existence of the carrier warehouse in Worcester in which a number of waggons were available for loading. It indicated how carriers needed to keep to their scheduled journeys and how they could not wait for members of a government committee to inspect their waggons. It suggested that nine different waggoners were used for the journey, and that Jolly operated 'fly wagons', that is waggons that travelled continuously, night and day. It appeared that changes of drivers, as well as horses, were part of the fly-wagon system. It suggested regular carrier services to Kidderminster, and the 1820's directories show a thrice weekly service between Worcester and Kidderminster on Mondays, Wednesdays and Fridays. A picture of 'A broad-wheeled waggon between Ludlow and London' found in the Kuntsmuseum, Basle and used as an illustration in Gerhold's, Road Transport before the Railways (1993) (Plate 5.1), appears to be of similar design to the experimental waggon used by John Jolly.<sup>15</sup>

According to trade directory evidence, John Jolly was in business in the Shropshire area from at least 1818 through to 1850. In 1850 he finally appeared in Slater's Directory as operating from Tenbury with a twice weekly service to Ludlow, Birmingham and London via Worcester. Over this period, John Jolly built up an extensive business from his bases in the Shropshire area, covering a swathe of the country that linked the Shropshire area with the north-west and south coast (see Figure 5.3). Unlike other large carrier firms in

<sup>15</sup> This picture also appears on the dust-cover of J. Vince, An Illustrated History of Carts and Wagons (1975) from which Plate 5.1 was copied. It is probably a waggon owned by a Robert Taylor, and I am indebted to David Lloyd who is researching the town of Ludlow for a PhD at Wolverhampton University for this last piece of information.



Plate 5.1



A broad-wheeled waggon between Ludlow and London.

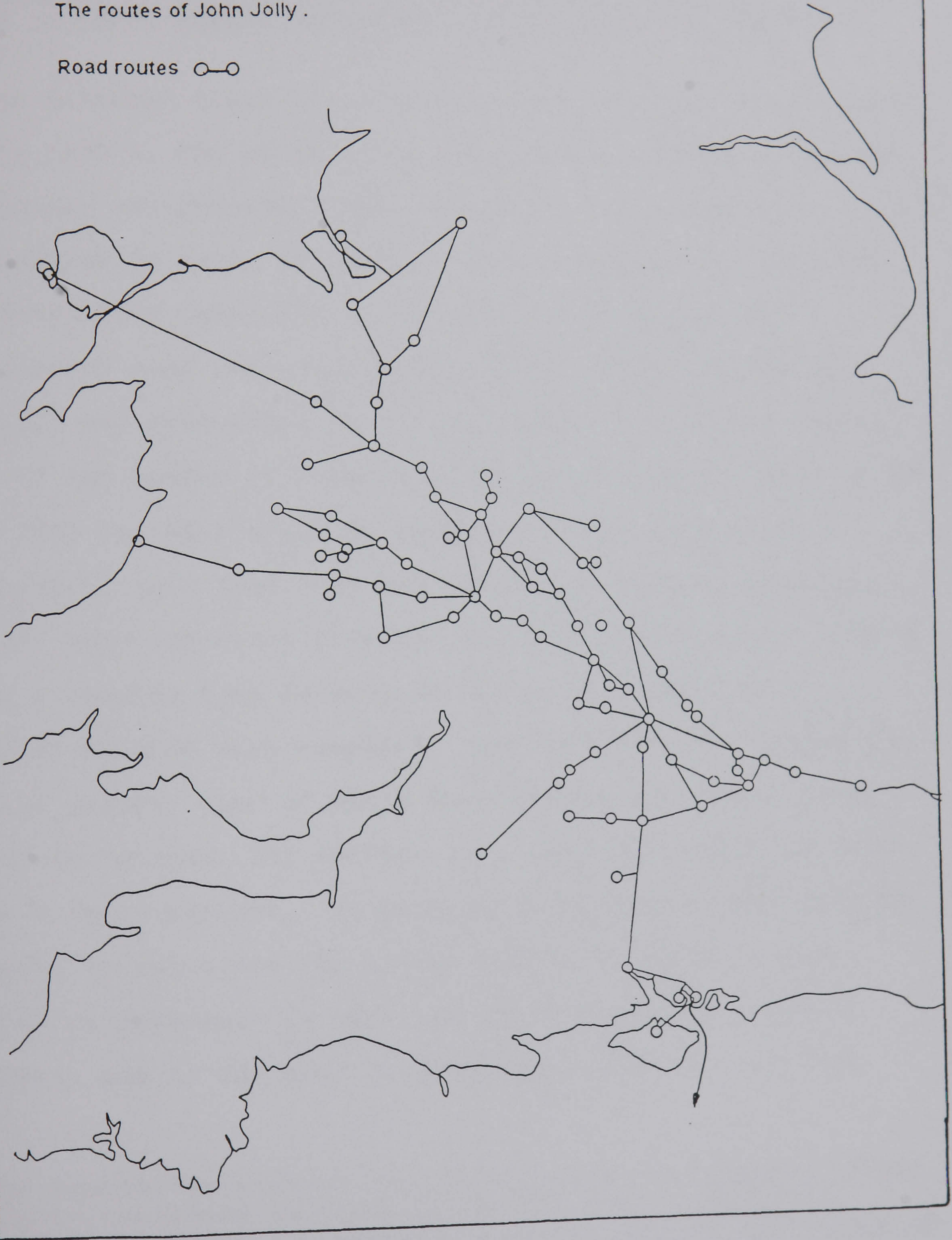
Original from Öffentliche Kunstsammlung Basel,  
Kunstmuseum.



Figure 5.3

CARRIER ROUTES FROM THE SHROPSHIRE AREA  
The routes of John Jolly.

Road routes ○—○





the area, Jolly appears to have concentrated on providing road-waggon services and had little to do with waterway transport systems.

An analysis of the carriers routes and the location of their bases in three towns, Shrewsbury, Birmingham and Worcester.

An in-depth study was undertaken of three different towns in the 1830's, the period when the highest number of carrier warehouses was recorded. The centres were, Shrewsbury (population in 1831, 18,102) Worcester (population, 19,336) and Birmingham (population, 146,986).<sup>16</sup> To assess the comparative road carrying importance of these centres an analysis was undertaken of (a) the number of carrier routes and (b) the number of outward journeys each week, listed in the year 1835 for each town. To ensure that the results were comparable, data from only one directory, Pigot's Directory (1835), were extracted from the database. Even so this proved to be a complex task because of the way in which the original records were compiled. One carrier could appear for several places, some of which were en-route to others, and therefore to count all entries for a carrier name would have given a false picture. To overcome this problem the data was upgraded to calculate the actual routes followed by each carrier by reference to maps, to the frequency of outward journeys, and to the days on which each carrier travelled.

<sup>16</sup> The population figures have been extracted from the Census Abstracts contained in Irish University Press, British Parliamentary Papers: Comparative Account of the Population of Great Britain in the Years 1801, 1811, 1821 and 1831 (1968). The Shrewsbury figure is the estimated population of Shrewsbury town. In 1851 the town population was 85% of the overall borough area and the figure used here represents 85% of the 21,297 which was the recorded population for 1831.



In some cases a carrier was listed as making an unspecified number of journeys. An example was the 'middling' carrier James Gardiner who was listed as providing a service from Worcester to Stourbridge and Kidderminster. The entries stated that he travelled, 'several time a week'. However, by cross reference to the entries for Kidderminster it was established that, in fact, he undertook five journeys every week, although he was not listed as a carrier in the entries for Stourbridge. Because Kidderminster was on a logical route to Stourbridge these entries were counted as one route with five journeys per week. Although in other periods there can be a number of entries which have an unspecified frequency, in this particular period only one other carrier was shown without a frequency indicator, and from other records it was a simple task to establish his normal frequency.<sup>17</sup>

The analysis also indicated that carriers undertaking a particular route would occasionally call at an additional destination. An example was the 'local' carrier Hannah Foden who provided a service from Birmingham to Lea Marston twice a week, but appears to have extended her route beyond Lea Marston to Kingsbury once a week. For 'local' carriers the extension of such a service was not classed as an additional route or journey. Therefore for Hannah Foden one route has been counted with two journeys.

The same criteria however was not applied to 'national' carriers because of their scale. An example is again drawn

<sup>17</sup> Because the analysis was undertaken on a weekly basis carriers, such as David Davies who ran a fortnightly service from Shrewsbury to Llangollen and Bala, were counted as half a journey per week.



from Worcester. The carrier J. & W. Ashmore was listed as covering five routes, to Leicester, Birmingham, Tewkesbury and Bristol via Cheltenham, on seven days a week; and to Gloucester, three days a week. It is clear therefore, that Ashmore ran a daily service from Leicester to Bristol via Birmingham, Worcester, Tewkesbury, and Cheltenham. As outward journeys from the town of Worcester were analysed this single route was counted as two outward journeys, one to the north-east and one to the south. There was however the thrice weekly service to Gloucester and it could be argued, that on three days out of seven the route to the south included a journey via Gloucester. However, because of the scale of this carrier's business, and the fact that he had a warehouse in Worcester where goods for different routes could be exchanged, the route to Gloucester was counted as additional to the other routes. Therefore they are included in Table 5.9 as three outward routes, and seventeen journeys from Worcester.

Table 5.9

**Analysis of outward routes and journeys from Birmingham, Shrewsbury and Worcester in the year 1835.**

Town	Type of Carrier	Number of Routes	Number of Journeys
Shrewsbury	Local	11	19
	Middling	36	63.5
	National	44	77
	Total	91	159.5
Worcester	Local	44	77
	Middling	30	71
	National	29	85
	Total	103	233
Birmingham	Local	32	74
	Middling	80	205
	National	45	171
	Total	157	450



Although the populations of Shrewsbury and Worcester were very similar in 1831, in terms of road transport systems Worcester, with 103 routes and 233 outgoing journeys, was of more importance than Shrewsbury, with 91 routes and 159.5 outgoing journeys. While Birmingham was very important as a centre for 'middling' and 'national' carriers, Worcester had at this period more 'local' carrier services with 44 local carrier routes and 77 outgoing journeys, against Birmingham's 32 routes and 74 journeys. This was probably due to the Birmingham hinterland being served by 'middling' carriers.

The number of routes and journeys undertaken by Ashmore, took into consideration the fact that he had a warehouse situated in Worcester. The sites of warehouses either rented or owned by carriers, together with the inns and wharfs were studied for each of the three towns, to discover if any pattern could be seen in their geographic location. Contemporary maps were used in conjunction with the later 25" ordnance survey maps and other sources giving useful information. In Shrewsbury and Worcester libraries, for example, a typescript analysis of inns by local historians proved very useful in checking any change in inn names.

#### The Shrewsbury warehouses and inns in the 1830's.

In Shrewsbury in this period, by far the most important bases were the warehouses of which there were nine in operation. They acted as the base for forty-eight carriers (nine 'national', thirty-eight 'middling', of whom eight also used an inn, and one 'local' who also used an inn). Six of these warehouses were run by road carriers and the remaining three by waterway carriers. Twelve inns acted as carrier bases



catering for fourteen 'local' carriers and sixteen 'middling' carriers, of which nine also called at various warehouses. Three 'middling' carriers also operated from their 'own house' which was assumed to mean the carrier's own living accommodation. The location of the inns and warehouses is shown in Figure 5.4 with an accompanying key list to show the names of inns etc.

In a street called the Mardol, where the Powell warehouse had been built in the 1780's, a warehouse owned by Sarah Tombs was operating in the 1830's (see also pp 247-8 above). Sarah Tombs ran waggons linking Shrewsbury to Wolverhampton and Birmingham and at this time acted as an agent for Pickford & Co. The directories stated that her waggons connected with Pickford's 'Fly Boats operating from Birmingham to London'.

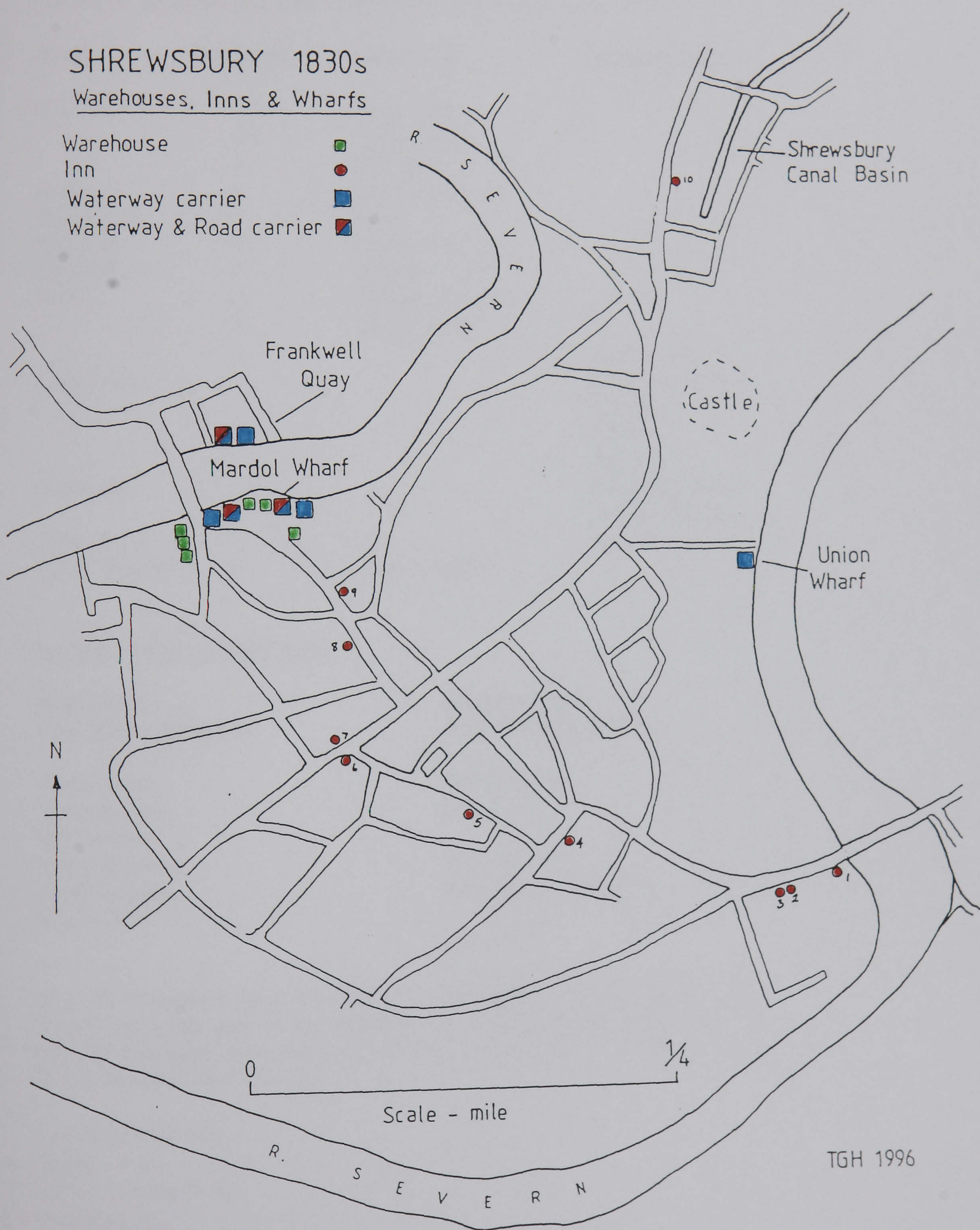
The Mardol led from the centre of Shrewsbury to the river Severn, and four warehouses were established at Mardol Quay, owned by Crowley & Co., Thomas Harwood, Henry Newton and John Maxon. All of these warehouse owners were involved in transport, Maxon in purely road transport and Crowley & Co. in road and waterway transport. Harwood and Newton had been in business from at least 1822 when they were recorded in Shrewsbury as waterway carriers. Henry Newton who had migrated from Leominster lived in Bridge St.<sup>18</sup>

Up until 1835, the primary waterway used by Shrewsbury carriers was the River Severn, and regular services were

<sup>18</sup> The 1851 census enumerator book states that he was born in Leominster circa 1796 and that his wife Catherine was born in Shrewsbury. Two sons and one daughter are recorded, the eldest being George who at 21 was a silversmith, William aged 17 assisted his father and Catherine was aged 15. HO 107. 1992. Shrewsbury District 1c, no. 208.



Figure 5.4





KEY TO MAP NUMBERS FOR INNS IN SHREWSBURY (1830'S) SHOWN ON FIGURE 5.4

(a ? indicates the probable site of inn) with name of the warehouse owners located in the street and list of waterway carriers and wharfingers.

Street	Map Number	Name of Inn	Warehouse owner.
Wyle Cop.	1 ?	Severn Trow	
"	2 ?	Spread Eagle	
"	3	Old Wherry	
Belmont.	4	Old Post Office	
Princess St.	5	Bell	
Market St.	6	George & Dragon	
Shoplatch. *	7	Mermaid	
Mardol.	8	Elephant & Castle	
"	9	Castle & Falcon	
"			Sarah Tomb's
Mardol Quay.			Crowley Hicklin's
"			Harwood's
"			Maxon's
"			Newton's
Bridge St.			Wallington Wallis
"			Robert's/Hilton's
Circus Place			Knight's
Castle Foregate	10	Crown & Anchor	

Waterway Carriers & Wharfingers

**Mardol Wharf.**  
**River Severn Navigation**

Thomas Brown.  
Thomas Harwood.  
Henry Newton.  
Thomas Wilcocks.  
George Goodwin.  
W. & B. Devy.

**Frankwell Quay.**  
**River Severn Navigation**

Thomas Bratton.  
John Jones.  
  
**Union Wharf.**  
**River Severn Navigation**  
  
John Rees.

Note: The Shrewsbury Canal was linked to Birmingham & Liverpool Junction Canal in 1835 and became part of The Shropshire Union Railways and Canal Company in 1846. By 1840 major water-way companies were operating from the canal basin in Castle Foregate, they included:

Crowley Hicklin & Co.  
Henshall & Co.  
Neptune Conveyance Co.  
Pickford & Co.  
Tilston Smith & Co.



provided down-river to Bristol. Up until 1835 the Shrewsbury canal only connected to the Shropshire coalfield, and its primary purpose was to carry coal to the town. The nearest main-line canal wharf was on a branch of the Ellesmere Canal at Edstaston, just north of the town of Wem. One carrier, Peter Hilton, who owned one of the Shrewsbury warehouses, ran a daily carrier service to Edstaston Wharf as well as running a weekly road service to Wrexham and Chester.

In 1835 however, the Shrewsbury Canal was connected to the newly opened Birmingham and Liverpool Junction Canal by a branch from Norbury Junction to Wappenshall Wharf (SJ 6614), just north of Wellington. Although some improvements were made to the Shrewsbury Canal at this time it still could not take the larger size narrow-boats used on the main-line canals and goods had to be transhipped at Wappenshall. In spite of this difficulty, later directories showed that large scale waterway carriers such as Pickford and Co., Henshall & Co., The Neptune Conveyance Co., and Tilston Smith and Co., began operating from the Shrewsbury canal basin soon after 1835. By the 1840's the existing road and waterway carrier Crowley & Co. (by then called Crowley Hicklin and Co.), had moved their base from Mardol Quay to the canal basin.

Alongside the directory evidence of waterway carriers was placed a unique list of Shrewsbury boat owners dated 1837.<sup>19</sup> This source showed that Thomas Harwood, a purely waterway carrier, was an owner of five boats:

Black Boat - 8 tons,	Hero - 8 tons,
Flora - 12 tons,	Mary - 40 tons,
William - 40 tons.	

<sup>19</sup> C. Hulbert, History & Antiquities of Shropshire (1837).



James Harwood also ran a 30 ton boat called the Welcome. Four other boat owners were listed and all appear to have run a regular service as far as Bristol, although none had their own warehouse.

Other owners and boats listed were:

John Rees:	Betty - 40 tons, Prudence - 35 tons, and two unnamed boats of 10 and 6 tons each.	Success - 40 tons,
John Jones:	Utility - 8 tons, Union - 45 tons,	Wonder - 40 tons, Perseverance - 50 tons.
Thomas Bratton:	John - 6 tons Eliza - 50 tons.	Nelly - 30 tons,
Thomas Wilcox:	Happy Return - 6 tons,	Prosper - 35 tons.

Of the above, Thomas Bratton and John Jones operated from Frankwell Quay situated on the west bank of the Severn opposite the Mardol Quay. Thomas Bratton appeared in local directories as a barge owner from 1812. Preston stated that he 'began his independent career as a barge owner in 1812 on the death of his former partner, John Hodgkiss.' Preston further stated that in the 1841 census Thomas was aged 70 but that his origins were unclear. He said 'He is probably identified with the Thomas Bratton grocer of Mardol, who was admitted a burgess of the town in 1796, who married Eleanor Haynes at St. Chad's in 1799.'<sup>20</sup>

Although his wife was recorded as Eleanor, she was known as Elizabeth, and Bratton's 50 ton boat listed above was probably named after her. A rare pencil drawing (Plate 5.2), thought to have been made in the 1830's by a local artist Philip Vandyke Browne (1801-68), shows 'The Eliza' tied up at

<sup>20</sup> R. A. Preston, 'The Eliza: a 19th century trow at Shrewsbury', T.S.A.S., vol. 68 (1993), pp. 116-17.



Plate 5.2

Copied from Transactions of the Shropshire  
Archaeological and Historical  
Society, vol 68 (1993) p. 116

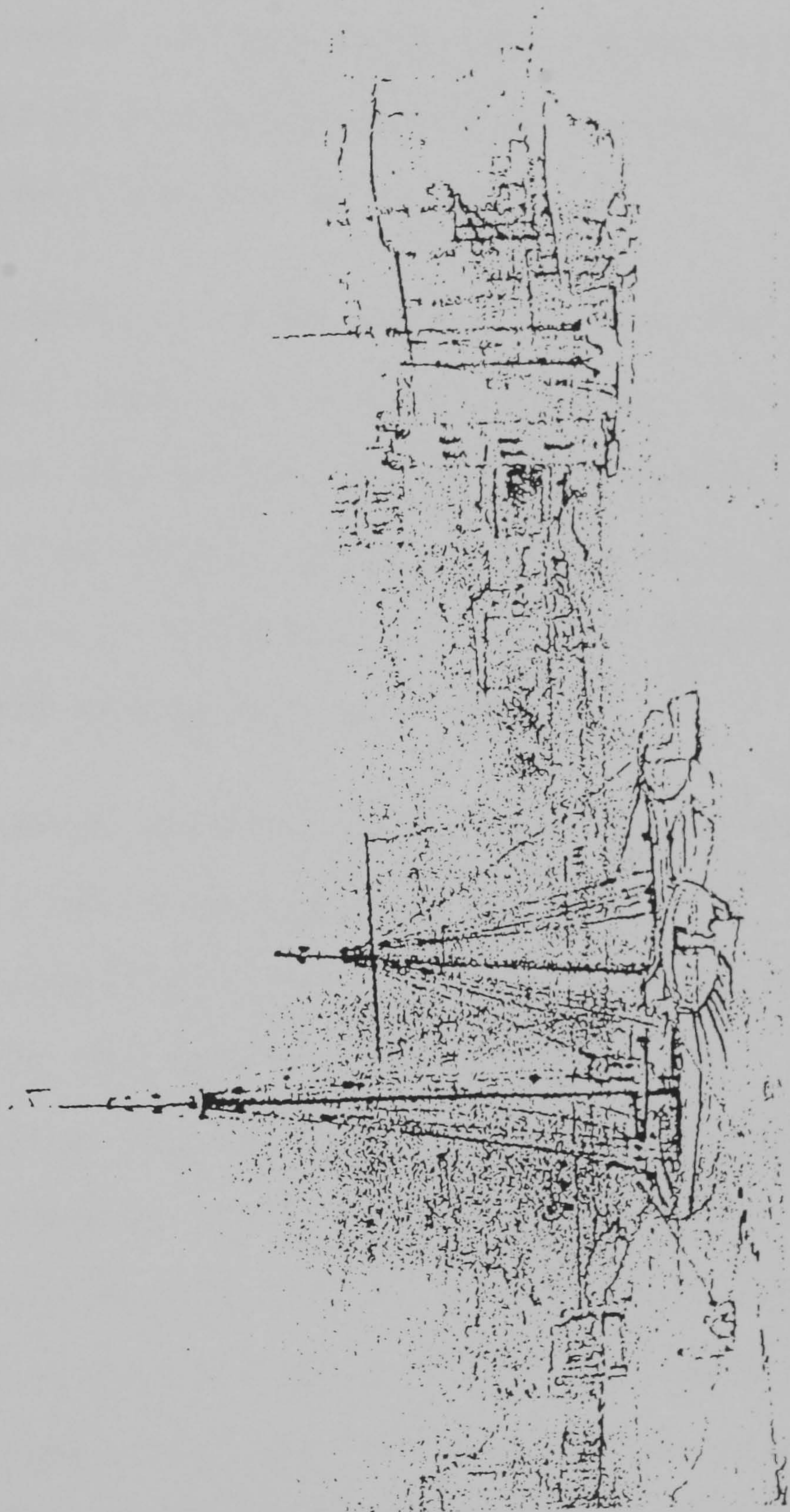


FIG 1 SHREWSBURY FROM THE WELSH BRIDGE. PENCIL DRAWING BY PHILIP VANDYCK BROWNE. THE ELIZA IS IN THE FOREGROUND.



Frankwell Quay. This picture also shows other boats and the cluster of warehouses at Mardol Quay on the opposite side of the river.

Henry Newton did not appear to have owned boats, but in addition to running a warehouse and providing waterway services he was also a brewer and hop merchant. Thomas Wilcox operated from Mardol Quay as did other waterway carriers, Thomas Brown, George Goodwin and W & B. Devey.

All the warehouse keepers provided facilities for the transfer of goods by other road carriers. A warehouse located in Bridge St. in 1829, was run by the carrier Wallington, Wallis & Co. By 1835 this warehouse appears to have been taken over by either Peter Hilton or Owen Roberts both of whom are listed as having their own warehouses in Bridge St.

Crowley & Co. (or Crowley Hicklin & Co.) was one of the largest road and waterway carrying organizations in this period. Their extensive operations are listed in directories from the 1820's through to the 1850's. Apart from their warehouse in Shrewsbury they appear to have owned warehouses in Birmingham and Wolverhampton, they also operated from wharfs in Kidderminster and Worcester combining road carrying with their waterway operations. The extent of their business operations is shown in Figure 5.5. By the late 1840's Crowley & Co. had been integrated with a major London carrying group Chaplin and Horne (Figure 5.6) and thus became tied into the growing network of railway agents.

Another carrier who based some of his operations in Shrewsbury was John Jones who, as has been shown above,



Figure 5.5

CARRIER ROUTES FROM THE SHROPSHIRE AREA  
The routes of Crowley & Co.

Road routes



Water-way and Canal routes





Figure 5.6

**CROWLEY, CHAPLIN & HORNE,**  
**AGENTS FOR**  
London and North Western, Midland, York  
and Newcastle, Bristol and Birmingham, Lan-  
cashire & Yorkshire, Caledonian & Scottish  
**RAILWAY COMPANIES,**  
**RECEIVE AND FORWARD GOODS**  
**FROM AND TO**  
**ALL PARTS OF THE UNITED KINGDOM.**  
**Ltd,**  
**CARRIERS**  
**==**  
Great Western, South Western, Brighton,  
London & Dover, and Eastern Counties  
**ROADS &c**

---

**LONDON RECEIVING HOUSES:**  
**HAMBRO' WHARF, THAMES STREET;**  
Swan with Two Necks, Lad' Golden Cross, Charing Cross,  
Lane. George & Blue Boar, Holborn.  
Cross Keys, Wood-street. Spread Eagle, Regent Circus.  
Spread Eagle, Gracechurch-st. Griffin's Green Man and Still,  
Bolt-in-Tun, Fleet-street. Oxford-street.


Every Particular of RATES, &c. may be  
obtained at the RAILWAY STATION; or at any  
of their BRANCH OFFICES.

**CROWLEY & CO.**  
BIRMINGHAM, December, 1849.

From Slater's Directory (1850)

Figure 5.7

**ELLESMERE & MAESTERFYN**  
**COAL, COKE, & LIME WHARVES**  
Quina Brook Lime Works, near WEM.  
**JOHN JONES,**  
**COAL, LIME, & TIMBER**  
**EX-CALIBUR,**  
Dealer in every description of English and Foreign Timber, Ladders,  
Laths, Slates, Hair, Flooring Tiles, Fire Bricks, Fire Clay, Fire Slabs  
for Grates, Glazed Closet Pans and Traps, Glazed Socket Pipes and  
Draining Tiles, Grindstones, Plaster of Paris, Portland, Roman,  
and other Cements, Agricultural and Fine Salt, Artificial Manures, &c.



**BOAT BUILDER, COACH BUILDER,**  
**WHEELWRIGHT,**  
Albarringer and General Carrier,  
**CANAL WHARF,**  
**ELLESMERE.**

*A Large Assortment of*  
**HAVES, SPOKES, AND WHEELS**  
*Dry and Ready for Use, always on hand.*  
OMNIBUSES, FLYS, CARRIAGES, DIGS, AND POST HORSES ON HIRE AND SALE.  
101 N.S.W.—vii

From Slater's Directory (1868)



operated boats on the Severn. He also operated as a road carrier and (if it is the same John Jones) had a business base at Ellesmere (Figure 5.7), which combined water-way and road carrying with the business of a coal, lime and timber merchant. He owned and ran the lime works at Quina Brook, just north of Edstaston Wharf, which was the terminus on this branch of the Ellesmere Canal.<sup>21</sup> This branch had been intended to extend further east to village of Prees. As Figure 5.8 indicates the road-carrying routes of John Jones were primarily into mid Wales, and from Ellesmere and Shrewsbury he connected mid Wales with the south-west via the river Severn, and via the Ellesmere Canal to the northern canal network.<sup>22</sup>

#### The Worcester warehouses and inns in the 1830's.

In Worcester in this period, twenty-six inns provided a base for two 'national' carriers, forty-five 'middling' carriers and sixty-two 'local' carriers. Of the two 'national' carriers Haines Bland and Co., operated from the 'Crown' in Friar St. which was also a coaching inn. The other 'national' carrier was Thomas Johnson who ran from the 'Peacock' in Queen St. (sometimes recorded as The Old Peacock). Four other 'national' carriers are listed operating from Queen St; Robins Mills & Co., German Wheatcroft & Co., J. Bloomfield, and Price & Blandy. None of these 'national'

<sup>21</sup> The dry basin of this terminus and the remains of the lime kilns can still be identified in a private house garden by the road from Wem to Whitchurch [SJ 523330].

<sup>22</sup> Most of the Shrewsbury warehouses were located in the area close to the Welsh Bridge, but one boat owner, John Rees used the Union Wharf which was situated at the bottom of a steep sided bank down river of the English Bridge at the site of the medieval Water Gate.



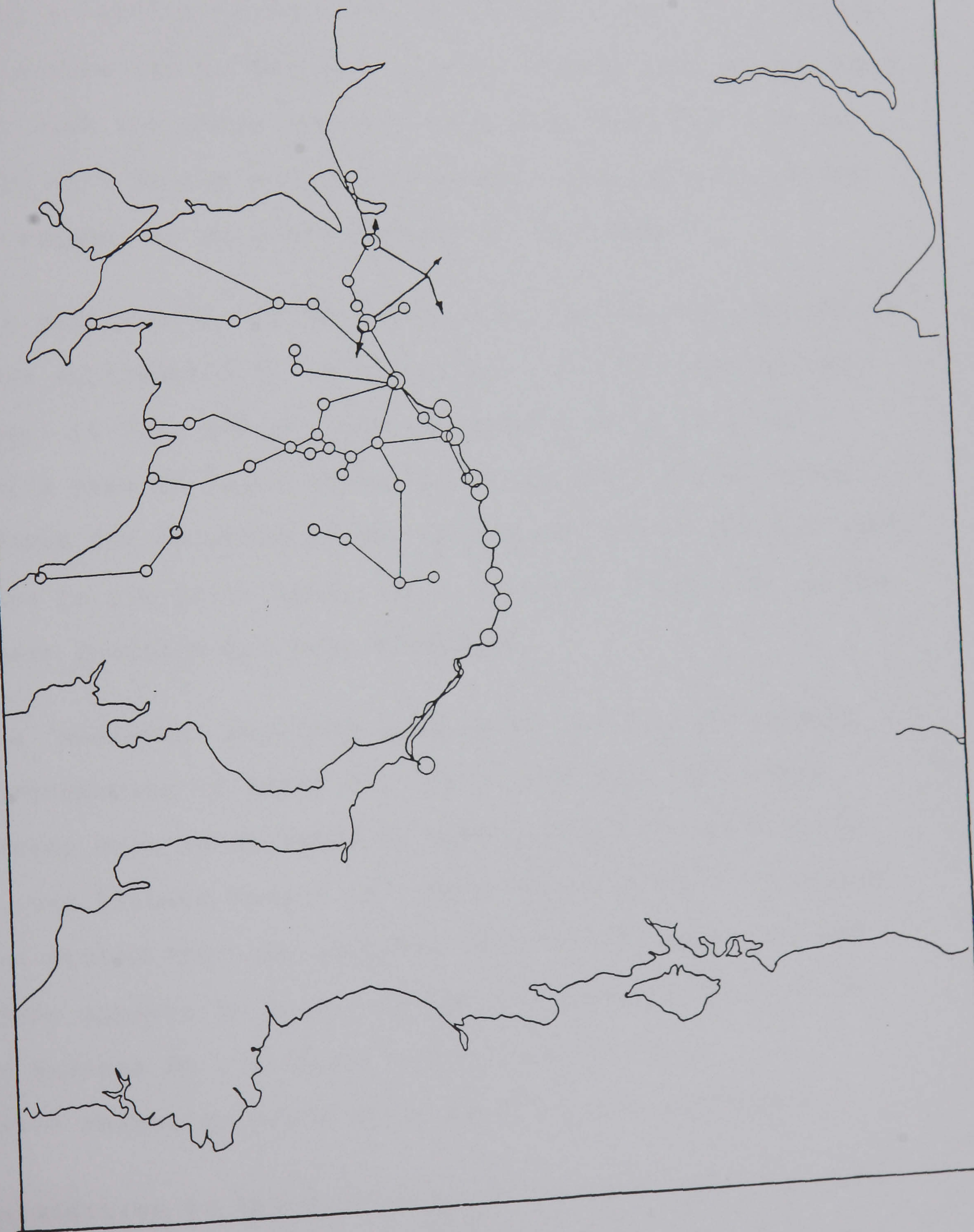
Figure 5.8

CARRIER ROUTES FROM THE SHROPSHIRE AREA  
The routes of John Jones

Road routes



Water-way & Canal routes





carriers stated that they owned a warehouse, and it is probable that they too, with one additional 'middling' carrier also ran from 'The Peacock'. One local carrier ran from the 'Paul Pry' Office in Broad St.. The 'Paul Pry' was a coach which ran from London to its terminus in Worcester, and operated from the 'Crown' mentioned above. This local carrier provided a service to Malvern, which was a Spa, and although other coaches ran to Malvern it would appear that he provided a vital link for those travelling by the 'Paul Pry'. It is probable that he ran a cart for baggage and servants rather than a waggon, or an early version of an omnibus.

The distribution of Worcester inns, warehouses and wharfs is shown as Figure 5.9. Of these the exact location of the Archangel in Fish Street, and the Waggon and Horses and Currier's Arms in Angel Street are uncertain. Street names were given for location of the warehouses but it has not been possible to pin-point their exact location, therefore on the map their position has been estimated.

The 'national' carriers John Jolly and J. & W. Ashmore owned warehouses in Angel St.. In St. Nicholas St. three warehouses were established by Gabb & Shurmer, James Price North, and Richard Wade & Co.; Mary Wynde another 'national' carrier stated that she operated from St. Nicholas St. and therefore appears to have used one of these warehouses. In nearby Sansome St., Richard Lockett operated his extensive routes to South Wales from his own warehouse.

In addition to the warehouses operated by road carriers there were also warehouses situated at three waterway locations in Worcester. The carriers listed below are



Figure 5.9

WORCESTER 1830s

Warehouses, Inns & Wharfs

- Warehouse ■
- Inn ●
- Waterway carrier ■
- Waterway & Road carrier ■





KEY TO MAP NUMBERS FOR INNS IN WORCESTER (1830'S) SHOWN ON FIGURE 5.9  
(a ? indicates the probable site of inn) with name of the warehouse owners located in the street and list of waterway carriers and wharfingers.

Street	Map Number	Name of Inn	Warehouse owner.
London Road.	1	Cross Keys	
Sidbury.	2	Kings Head	
"	3	Hare & Hounds	
"	4	Angel	
"	5	Talbot	
Friar St.	6	Coventry Arms	
"	8	Crown	
Fish St.	7 ?	Archangel	
Pump St.	9	Horse & Jockey	
High St.	10	Golden Lion	
New St.	11	New Greyhound	
"	12	Pheasant	
"	13	Old Greyhound	
"	14	Swan with Two Necks	
Mealcheapen St.	15	Reindeer	
Bridge St.	16	Bridge Inn	
Newport St.	17	Green Dragon	
Broad St.	18	Bell	
"			Paul Pry Office
Angel St.	19 ?	Waggon & Horses	
"	20 ?	Curriers Arms	
"	22	Horn & Trunmpet	
"			Ashmore's
"			Jolly's
The Cross.	21	Bird in Hand	
St Nicholas St.	23	Packhorse	
"			Gabb & Shurmer's
"			Price's
"			Wade's
"			Lockett's
Sansome St.			
Queen St.	24	Old Peacock	
Cornmarket.	25	Wheatsheaf	

Waterway Carriers & Wharfingers

**Lowesmore Basin**

(Worcester & Birmingham Canal)

Pickford & Co.

Tildesley & Sturland.

John Ames & Co.

James & John Bromley.

Francis H Needham.

**The Quay (River Severn east)**

Clay Newman & Co.

Luke Pyfinch Maybury.

William & Richard Rice.

John Pomphrey.

**Diglis Basin**

(Worcester & Birmingham Canal)

Pickford & Co.

Tildesley & Sturland.

John Ames & Co.

Crowley Hicklin & Co.

Whitehouse & Sons.

George Bird & Sons.

Henry Southan.

Danks, Venn & Co.

William Partridge.

Stukey & Co.

William & Benjamin Devy.

Barnett & Co.

Brown & Son.

**St Clements Gate (River Severn west)**

John Childley Broadfield.



waterway carriers but those marked (R) also ran road-transport services in other areas but are not recorded as such in Worcester. From Lowesmore Basin on the Worcester & Birmingham Canal (opened in 1815) five major carriers operated; Pickford and Co., (R) Tildesley and Sturland, John Ames and Co., James & John Bromley, and Francis H. Needham (R). Of these, the first three also used Diglis Basin as a wharf. From Diglis Basin a further ten major carriers were operating:

Crowley Hicklin & Co.,	(R)	Whitehouse & Sons.,	(R)
George Bird & Sons.,		Henry Southan.,	
Danks, Venn & Co.,	(R)	Brown & Son.,	(R)
William Partridge.,		Stukey & Co.,	
William & Benjamin Devy.,	(R)	Barnett & Co.,	

A further five solely waterway carriers were Clay, Newman & Co., Luke Pyfinch Maybury, William & Richard Rice and John Pomphrey, all of whom operated from the Quay on the River Severn, and John Childley Broadfield who operated from St. Clements Gate.

Although the population of Worcester was not much greater than Shrewsbury in the 1830's it had become a much more important transport centre. After the opening of the Staffordshire and Worcestershire Canal in 1772, a river-side port was developed at Lower Mitton (12 miles up-river and later called Stourport). The Worcester directories for the 1790's indicated that, as Stourport developed, there was a decline in river traffic along the upper reaches of the river Severn and to Shrewsbury. In 1790 five boats were recorded going from Worcester to Shrewsbury and five to Stourport. In 1794 two went to Shrewsbury and seventeen to Stourport.



Further, Worcester was on the junction of two main roads, one from Birmingham to Bristol and south-Wales, and one from London via the Cotswolds and Evesham, to mid-Wales and to the coast at Aberystwyth. To this already thriving entrepot, on its important position on river and road networks, had been added a further link in 1815 the Worcester & Birmingham Canal. Apart from providing a more direct canal route to Birmingham, this canal was linked to the Stratford-upon-Avon Canal and via the Kingswood Junction to the Grand Union Canal, the Coventry Canal and the Oxford Canal in 1816. So from this time Worcester was provided with a direct waterway link with the east Midlands, the North of England, via the Trent and Mersey canal, and by two routes to London, via the Oxford canal or the more direct route via the Grand Union Canal.

The construction of the Worcester and Birmingham Canal, which started in 1791, caused considerable arguments with canal operators whose trade was based upon routes to the river Severn via Stourport. At the forefront of this battle for trade, was The Birmingham Canal Navigation who argued, that if the Birmingham and Worcester was joined to their canal, water, a precious commodity in this inland area, would be lost from their system. Initially, this problem was handled by leaving a seven-foot strip of land called the 'Worcester Bar' between the Worcester Basin and the Gas St. Basin. This meant that goods had to be transhipped from barges in one basin for shipment by barges on the other. However in 1815, when the Worcester & Birmingham was completed, a stop-lock was fitted that joined the two canal systems together, but costly tolls were imposed by The Birmingham Navigation for all goods passing through this lock, and a charge was also levied for



loss of water. The Worcester Bar is indicated on the map of Birmingham in the 1830's (Figure 5.10).

The Birmingham warehouses and inns in the 1830's.

The map at Figure 5.10 is based upon a survey of Birmingham made by J. Pigott Smith in 1824 and 1825 and published as a map in 1828. It shows that the centre of Birmingham was almost ringed by canals. In fact at this period apart from a development to the north much of the built-up area of the town was contained within the canal-ring.

Very few inns were shown on the Pigott Smith map, and no warehouses except for Pickford & Co., which was clearly indicated in the south-eastern sector of the town at the Warwick Junction Wharf. As in the Worcester directories, Birmingham warehouses were listed by street names and their estimated location has been plotted on the map. Their location indicates that in the 1830's there was a concentration of sites to the north and west of the town which were associated with the wharfs of the Birmingham Navigation, The Birmingham & Fazeley, and The Worcester & Birmingham Canals, thus emphasizing the important link which had been established between waterway and road networks.

A second concentration of carrier bases existed to the south-east of the town where a cluster of road-carrier warehouses existed in the market area around St. Martin's Church in the Bull Ring. To the east there were a further set of wharfs on the Birmingham & Warwick Canal in the Digbeth area and where, apart from Pickford's, two other 'national' carriers, Deacon Wade & Co. and Gabb & Shurmer owned or rented



Figure 5.10





KEY TO MAP NUMBERS FOR INNS IN BIRMINGHAM (1830'S) SHOWN ON FIGURE 5.10

(a ? indicates the probable site of inn) with name of the warehouse owners located in the street and list of waterway carriers and wharfingers.

Street	Map Number	Name of Inn	Warehouse owner.
Bromsgrove St.	1	Rose & Crown	
"	2	New Inn	
"			Jolly's
Hurst St.			Bosward's
Smallbrook St.	3	Malt Shovel	
"	4 ?	White Swan	
Edgbaston St.	5 ?	Rose	
"			Ashmore's
St Martins Lane.	6 ?	Horseshoe	
"	7 ?	Woolpack	
"			Pettifore's
Digbeth.	8	Red Lion	
"	9	Talbot	
"	10	Kings Head	
"	11	Horse & Jockey	
"	12	Castle & Falcon	
"	13	Bull's Head	
Oxford St.	14 ?	Acorn	
Bordesley St.			Deacon Wade's
"			Gabb & Shurmer's
Fazeley St.			Pickford & Co's
Spiceal St.	15	Spread Eagle	
"	16	Nelson	
Philip St.	17	Bell	
"	18 ?	Old Cross	
Freeman St.	20	Fox	
Moor St.	21	Tamworth Arms	
"	22	Roebuck	
"	23	Crown	
"	24 ?	White Horse	
"	25	Bull's Head	
"	26 ?	Star & Garter	
"			Wallis's
"			Haines Bland's
High St.	27	St George's Tavern	
Dale End.	28	Royal Exchange	
"	29	Red Cow	
"	30 ?	Cross Guns	
"	31	Engine	
"			Shackle's
Colleshill St	32	Rising Sun	
"			Butler's
Broad St	33	Crown	
Paradise St	34	White Hart	
Bull St	35 ?	Ship & Rainbow	
"			Sarah Tomb's
Crescent			German Wheatcroft's



Birmingham key continued.

Street	Map Number	Name of Inn	Warehouse owner.
Gt Charles St	36 ?	Bricklayer's Arms	
"	37	Old Crown	
"	38 ?	Golden Lion	
"			Danks & Co.
Livery St	39 ?	Turks Head	
Snowhill	40	Golden Cross	
"	41	Saracen's head	
"	42	Barrell	
"	43	Castle & Falcon	
"	44	Three Tuns	
"	45	Coach & Horses	
Gosta Green	46 ?	Peacock	

Waterway Carriers & Wharfingers

Crescent Wharf.	Great Charles St.
Birmingham Canal Navigation	Birmingham Canal Navigation
Batty & Co.	John Danks.
G.R. Birds & Sons.	Worthington & Co.
Crowley Hicklin & Co.	
German Wheatcroft & Co.	Friday Bridge Wharf.
Tildesley & Sturland.	Birmingham Canal Navigation
John Whitehouse & Sons.	
	George Swain & Co.
Aston Junction Wharf	Burton Wharf
Birmingham & Fazeley Canal	Birmingham & Fazeley Canal
John Howell	Thomas Jackson
Albion Wharf, Broad St.	Gas St. Wharf
Birmingham Canal Navigation	Birmingham Canal Navigation
Shipton & Co.	John Danks
Worcester Wharf.	Warwick Junction Wharf.
Worcester & Birmingham Canal	Warwick & Birmingham Canal
Pickford & Co.	Pickford & Co.
Brown & Co.	
Richard Greaves.	
William Partridge.	
Henry Southan & Co.	



their own warehouses. Twenty 'national' carriers operated from the fourteen carrier warehouses recorded in this period. Of these five also provided waterway transport; Pickford, whose main warehouse was at the Warwick Junction Wharf in Fazeley St.,<sup>23</sup> Gabb and Shurmer, and Deacon Wade and Co., in Bordesley St., Danks & Co., in Great Charles St. and German Wheatscroft and Co. at Crescent Wharf.

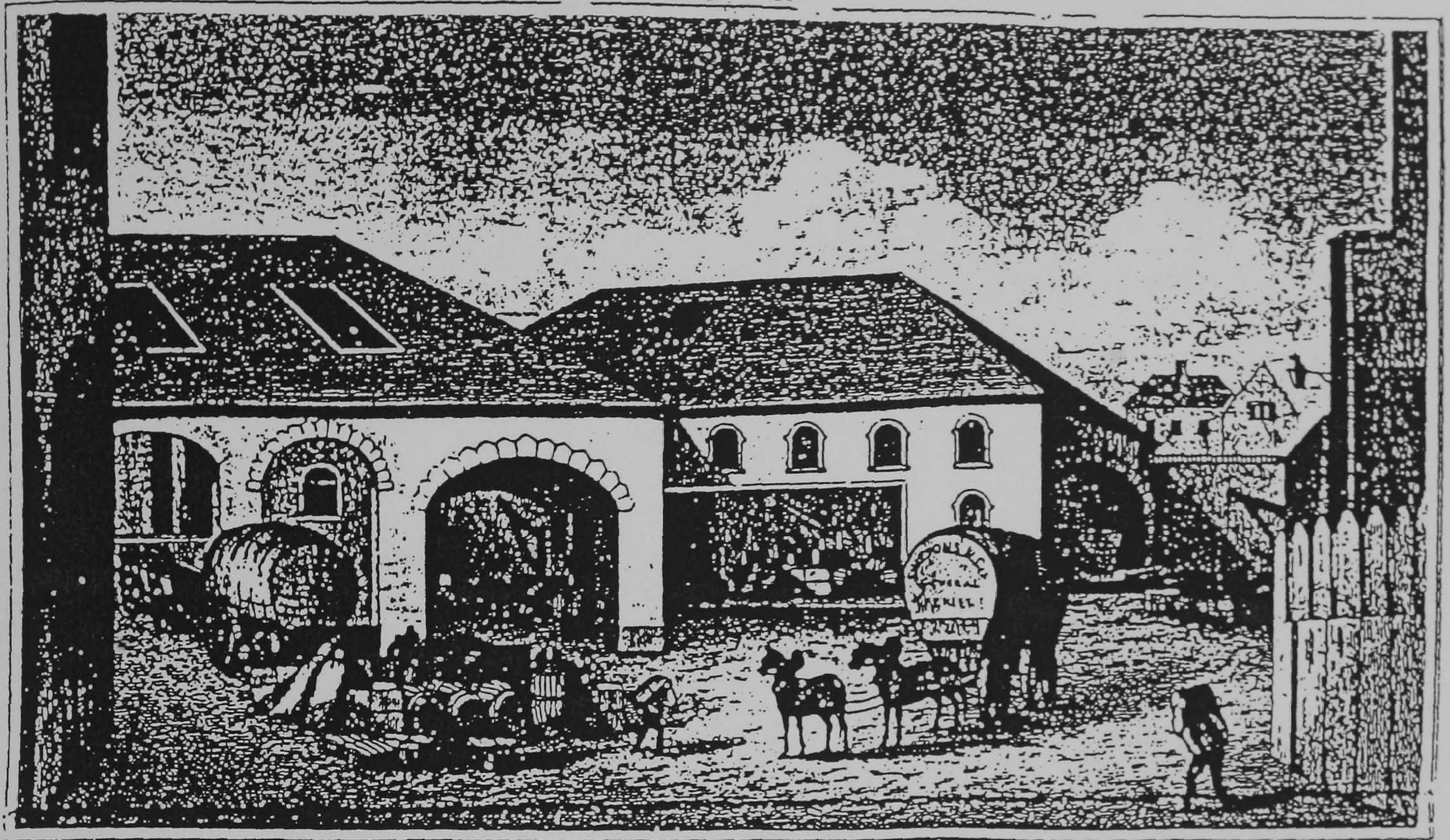
By using other contemporary and later maps the location of most of the carrier inns was established, while inns which had an uncertain location are shown with a '?' in the list that accompanies Figure 5.10. Eight 'national' carriers, eighty-three 'middling' carriers and forty-six 'local' carriers operated from the forty-six inns listed in this period. In addition one 'national' and seventeen middling carriers are listed as operating from addresses which cannot clearly be identified to a particular inn or warehouse and one 'middling' carrier, Catherine Hackett, worked from her own house.

Pictorial evidence of carrier warehouses is rare, but one was discovered on an advertisement for Shipton & Co., who used the Albion Wharf in Broad Street, Birmingham. Their main base appeared to be a warehouse located at The Albion Wharf on the Birmingham Canal in Horsley Fields, Wolverhampton. (Figure 5.11). This advertisement was contained in Bridgin's Directory of the Borough of Wolverhampton (1833) where this company was listed as running a daily road-carrier service to Bilston

<sup>23</sup> For a short period Pickford & Co. also had a warehouse at the Worcester Basin and no doubt transferred goods between their two warehouses by road rather than pay the tolls at the Worcester Bar. Their Fazeley St. warehouse had access to the other main canal system.



Figure 5.11



GOODS DAILY FORWARDED BY

SHIPTONS AND CO.'S

LICENSED FLY BOATS,

TO AND FROM

LONDON, LIVERPOOL, MANCHESTER,  
BIRMINGHAM, WOLVERHAMPTON,

PRESTON BROOK,

THE POTTERIES, CHESTER, WREXHAM, AND ALL PARTS OF THE NORTH.

BILSTON AND DUDLEY.

THE STAFFORDSHIRE IRON WORKS, AND ALL INTERMEDIATE PLACES.

Shardlow, Derby, Gainsborough, and Hull.

PLEASE TO CONSIGN ALL GOODS FROM

LONDON,	ISAAC SOWTER, 27, Wharf, City Basin,—Receiving-house, White Horse, Cripplegate
Manchester,	SAMUEL WAINWRIGHT, Ashton Canal Wharf, Piccadilly
Liverpool,	ROBERT DICKINSON, Duke's Dock
Preston Brook,	GEORGE MILLER, Duke's Wharf
Potteries,	GEORGE GREEN, Canal Company's Wharfs
Chester and Wrexham,	SARAH RUTTEN, Waggon Warehouse
Hull,	BROMBY and LELL, High-Street
Gainsborough,	FLOWER and SON
Shardlow and Derby,	SHUTON and Co.; and SORESBY and FLACK
Dudley,	Dudley-port Wharf
Gloucester,	BROWN and Co., Ship Basin
Bristol,	BROWN and Co., Head of Quay
Wolverhampton,	Albion Wharf, Horseley-Banks
Birmingham,	Albion Wharf, Broad-street

Goods forwarded to and from the West of England and South Wales.

From Bridgin's Directory of Wolverhampton (1833)



and Walsall. This route was also listed in Pigot's New Commercial Directory (1841) and they were also listed as providing a three-day road service between Kidderminster, Dudley, Birmingham and London. In Slater's Royal, National, Commercial Directory & Topography (1850) Shipton and Co., were listed as road-carriers for a three day a week service from Kidderminster to Bridgnorth and a daily service from Dudley to London.

By studying other directories between 1833 and 1851, and by reference to the advertisement it is clear that the prime role of Shipton & Co. was the provision of waterway services. The advertisement makes it clear that they were working in conjunction with other waterway carriers such as Brown and Co., who are listed in the notes attached to both Figures 5.9 (Worcester) and 5.10 (Birmingham) and on the advertisement had facilities at Gloucester and Bristol. Sarah Rutter's warehouse in Chester was listed in directories from 1828-1850 with road-carrier services linking Ellesmere and Wrexham with Manchester, and as far north as Glasgow and Edinburgh. Some doubts arise however about Sarah Rutter's route to Glasgow and Edinburgh as it is highly likely that goods for these destinations were transported by road or canal to Liverpool, where they were shipped by coastal vessels for these destinations.

In Figure 5.11 a waggon (with rather minuscule horses), is shown, and in the further warehouse a canal barge can be seen. The running of a canal arm into warehouses was a feature of waterway installations, and in Fazeley St., Birmingham this feature can still be seen today although the warehouse is now



a night club.

This analysis of the carrier and waterway bases used in these three towns, further demonstrates that by the third decade of the nineteenth century strong links had been established by many 'national' road carriers with the waterway networks. It also demonstrates that although the inn was still an important base for some carriers there was at this period a tendency for the more important carriers at both 'national' and 'middling' level to operate from warehouses. This facet of road carrying was however short lived, and as the railway network developed so there was both a decline of 'national' carriers and the use of warehouses, accompanied by a resurgence of inns as a base for road carrying.

The 'Shropshire Area' towns and their changing transport networks in the nineteenth century - conclusions.

This chapter has explained, how using an extensive computer database can allow a researcher to modify and enhance the data contained in original sources, such as trade directories. It has demonstrated the advantages that can be gained by the categorization of road carriers into three groups under the headings of 'national', 'middling' and 'local' services. Further, it has shown how applying a PIN to each carrier made it possible to trace their continuing activities through a number of periods, even though their names and scale of activity changed through time. In particular, the analysis has demonstrated how in the nineteenth century much more information was made available about 'local' carrying services and how these served the villages within a towns hinterland; a subject that is



discussed further in chapter seven.

It has shown how an analysis of the carrying trade can enhance our understanding of the changes in the transportation of goods that were taking place between the 1820's and the 1870's. In particular, a study of the carrier bases in three towns, Birmingham, Worcester and Shrewsbury has indicated how some larger carrying companies were not content to remain as road-carriers in a changing environment, but diversified into different transport systems. It has shown, how some of these companies provided an integrated road and waterway transport system, and how some became carriers for the developing railway companies. In the discussion on the development of the use of warehouses it has high-lighted that as certain transport companies increased in size, so the traditional use of an inn as a base declined and they established their own warehouses and wharfs. Such bases then became the focus for other carrying companies, as they provided storage and exchange facilities for inward and outward routes. Inns, however, still continued to be used as bases mainly for 'local' and 'middling' carriers and railway stations goods sheds added a new dimension to the distribution network although they rarely get a mention as a base. This chapter has therefore demonstrated the evolution of an integrated system of transport and warehousing which provided a vital country-wide network for trade and commerce.



CHAPTER 6.

FROM TRAMWAYS AND NINETEENTH-CENTURY CANALS TO THE  
DEVELOPMENT OF THE RAILWAY NETWORK.

A study of the changing nature of transport systems in the Shropshire area would not be complete without a reference to the development of the tramway which foreshadowed the building of the railways. In this thesis the term 'tramway' will cover a number of different terms which have been used to describe these early forms of railway, including waggonways, dramroads, and plateways.

In his seminal work, entitled Early Wooden Railways, Lewis has demonstrated, from pictorial evidence, the existence of tramways in continental Europe in the late medieval period.<sup>1</sup> These early tramways were associated with mining operations, and were especially prevalent in Germany. It is probable therefore that this transport system was introduced into Britain by migrant miners from Germany in the 16th century, although to date no evidence has been discovered to support this hypothesis. Clark claims that the earliest known tramways were used in Newcastle, but gives no date for their construction.<sup>2</sup> Buchanan however, states that Bertram Baxter considered that the earliest tramway was a wooden 'Rayle-way' constructed at Woolaton near Nottingham in 1603.<sup>3</sup> His statement is supported by Lewis, in whose research there is firm evidence to support the claim of Nottingham. Buchanan

<sup>1</sup> M. J. T. Lewis, Early Wooden Railways (1970).

<sup>2</sup> C. Clark, Ironbridge Gorge (1993), p. 96.

<sup>3</sup> R. A. Buchanan, Industrial Archaeology in Britain (1980), p. 302.



also shows that the earliest tramway in the Newcastle area was at Ravensworth in 1669.

In Shropshire, a little-known study entitled 'The Waggonways and Plateways of East Shropshire' was undertaken by Savage and Smith in 1965. Their work was based upon documentary evidence, early maps including field-name maps, and surveys of the area. Their cautious findings were based upon individual area studies using 6" - 1 mile scale maps, and the plotting of results on a series of sketch-maps covering different periods from the 1700's to 1840 at the 1: 50,000 scale. The aggregated result of these maps is shown as Figure 6.1 and indicates a complex structure of overlapping systems which had emerged at different periods. <sup>4</sup>

As an archaeologist, Clark has searched for more recent evidence of tramways in the mining area around the Ironbridge Gorge. She stated that written evidence was limited, what did exist could be ambiguous, and that the routes were short. She also pointed out that the archaeological imprint and field evidence for such systems is ephemeral. To date one small wooden waggon wheel has been discovered in Broseley, and although some tramways are known to have existed from documentary evidence, no surface trace has been discovered. <sup>5</sup> The first documentary evidence appeared to be in a dispute between a James Clifford and his tenant Richard Willcox in

<sup>4</sup> R. F. Savage and L. D. W. Smith, 'The Waggonways and plateways of East Shropshire', unpub. work, Birmingham School of Architecture (1965), SRRC ref. qM 251.

<sup>5</sup> Clark, Ironbridge Gorge, pp. 96-97.

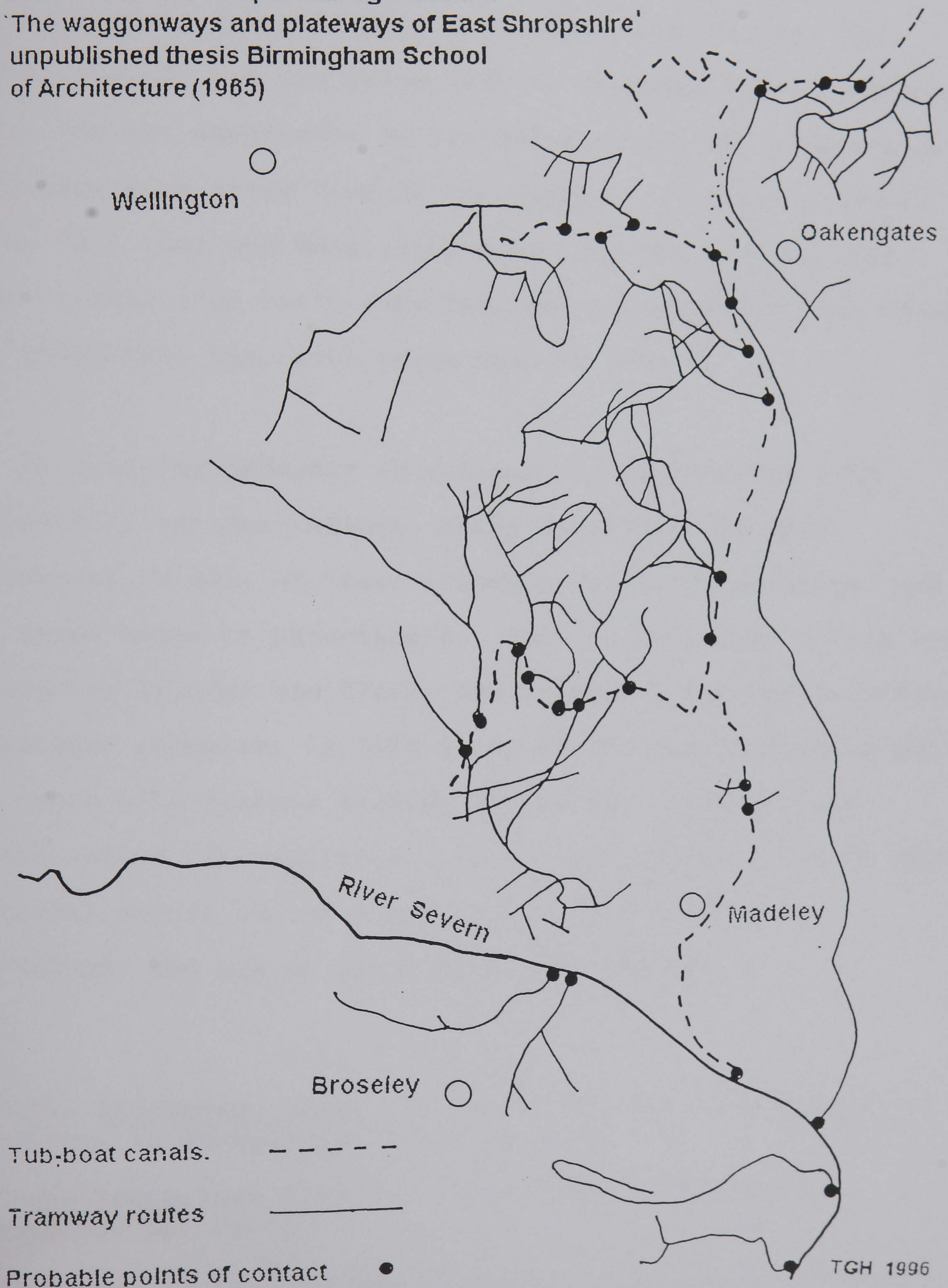


Figure 6.1

Routes of various Shropshire coalfield tramways

1700 - 1840 based upon Savage & Smith

'The waggonways and plateways of East Shropshire'  
unpublished thesis Birmingham School  
of Architecture (1965)





Broseley in 1608. 6

Trinder has indicated that by 1738 a tramway existed near Wellington in the northern part of the coal-field area, and Clark's research in the Ironbridge Gorge and the archaeological excavation near the Bedlam Furnace demonstrated that the early tramways were of wooden construction. The Bedlam tramway had oak rails laid on sleepers set on a bed of slag, and was apparently in use between 1750-60. Iron wheels and axles were being used on the waggons, as other evidence shows that they had been introduced into the area by 1726. Exactly when iron rails came into use is uncertain, but Clark has shown that they were being made by 1768.<sup>7</sup>

By studying Ordnance survey maps in conjunction with research by various authors, point locations and grid references of many of these tramways can be ascertained, and are shown below in parenthesis. Just to the south of the area studied by Trinder and Clark, the Wilkinson Society have also undertaken research. In 1985 a map was produced which showed the route of a tramway linking the Willey ironworks and a site called 'The Smithies', with a continuous route to two different wharfs on the river Severn, one at Swinney (SJ 702009) and one at Apley Forge (SJ 707983).<sup>8</sup>

<sup>6</sup> Clark, Ironbridge Gorge, p. 96; B. Trinder, The Industrial Revolution in Shropshire (1981) pp. 6-7.

<sup>7</sup> Clark, Ironbridge Gorge, p. 97; Trinder, Industrial Revolution, pp. 72-75.

<sup>8</sup> N.J.C. Map showing routes of railways from Willey Ironworks to River Severn, Journal of the Wilkinson Society, No 13 (1985), p. 8.



As discussed in chapter 3 above, the Ellesmere canal had been opened as far as Carreghofa (SJ 250200) just south of Llanymynech by 1796. This extension was an important feeder route for the mineral mining area around Llanymynech, in particular for the limestone quarries to the north of the village. Two tramways were built to bring limestone from quarries situated in Llanymynech Hill (SJ 265218) to wharfs on the canal at Llanymynech (SJ 265210) and Pant (SJ 278225). When the Shropshire and Montgomeryshire railway was opened in 1866, an extension of the southern tramway route was made to link this quarry to the main-line railway system.

Further north, other tramways were built linking the quarries at Crickheath Hill (SJ 2723) to Pant wharf, Porthywaen (SJ 260240) to Crickheath wharf (SJ 293235) and other mines and quarries in the Sweeny Mountain area to the canal near Morton (SJ 3024). From these quarries and wharfs limestone was delivered by narrow-boat to canal-side lime kilns, such as those built at Bagley (SJ 4127) and at Quina Brook (SJ 533330) following the opening of this branch of the Ellesmere canal, circa 1806.

In 1797, the Montgomeryshire Canal, which was linked to the Ellesmere Canal at Carreghofa, was extended to Newtown. This also provided a canal link for the town of Welshpool, and in about 1818 a tramway was built to Standert Stone Quarry which operated until 1854. This line became the basis for the Welshpool and Llanfair Light Railway.<sup>9</sup>

<sup>9</sup> Like the data extracted from secondary works on canals, the lists provided in similar books on railways can be regarded as a primary source for the study of the development of networks. The main works used are listed in note 10 below.



When in 1805 the Ellesmere Canal was opened across the Pontcysyllte Aqueduct to a terminal basin at Trevor a number of tramways were built. The first, which opened on the same day as the viaduct, was a double track plateway linked to William Hazeldine's collieries at Plas Kynaston. The immediate vicinity of the Pontcysyllte was rich in minerals, and apart from the coal mines, an iron-foundry, a chemical works, a fire-clay works and a pottery were also built along a short branch canal known as the Plas Kynaston Canal. Other tramways were constructed in the vicinity, including one which connected the canal basin to the mines of the Ruabon coalfield. <sup>10</sup>

In the 1870's another tram-way was built known as the Glyn Valley Tramway, which followed a route down the Glyn and Ceriog valleys. This tramway linked slate and granite quarries in the Glyn Valley to Gledrid wharf (SJ 299369) on the Ellesmere Canal, and to the Shrewsbury and Chester railway at Preesgwyn station (SJ 293360).<sup>11</sup>

Other short stretches of tramway that existed in Shropshire included one which linked the Gleedon Hill Stone Quarry at Farley (SJ 634019) to the river Severn at Buildwas,

<sup>10</sup> C. Hadfield, Canals of the West Midlands (1969), pp. 175-178 and 190-192; G. L. Crowther, National Atlas showing canals, navigable rivers, mineral tramroads, railways and street tramways, vol. 4, Wales and the Welsh Marches (1986); E. S. Tonks, The Shropshire and Montgomeryshire Railway (1972); R. K. Morris, 'A gazetteer of Passenger Railway Stations in Shropshire', T.S.A.S. vol. 64 (1985). For detailed surveys and maps of the various tramways that were built in north-west Shropshire see E. A. Wilson, The Ellesmere and Llangollen Canal (1975).

<sup>11</sup> Crowther, National Atlas; D. L. Davies, The Glyn Valley Tramway, Locomotion Papers, No 18 (1962); Hadfield, Canals of the West Midlands, p. 243; Wilson, The Ellesmere and Llangollen Canal, pp. 84-90.



and another known as the Mambly tramroad (circa 1796-7).<sup>12</sup> The latter linked Sir Walter Blount's coal works at Mambly, (SO 6971) to the end of the uncompleted Leominster Canal (SO 6770). The first load of coal was taken from Mambly, along a section of the canal to Wooferton, and delivered to the town of Tenbury in 1794. By the end of 1795 the canal was completed to Leominster, and on 27th July 1796 the Hereford Journal recorded that it: 'was now completely open, from Sir Walter Blount's coal works at Mambly to the town of Leominster... 14 barges laden with coal, having arrived at Leominster the first day the navigation was opened,'

Although it had been proposed to link the river Severn near Stourport with Leominster and points further west, the site near Mambly was as far as the Leominster canal reached. After the decision was reached to abandon the final leg of the canal, it was proposed to build a tramway, and this appears to have been started near Stourport but it too was never completed. Other tramways were proposed to link the canal to the coalfield on the Cleve Hills, through Yarpole to Mortimer Cross, but these plans never came to fruition. The main reason for the collapse of this canal scheme was the introduction of railways to the area. Finally, after much wrangling, the Shrewsbury and Hereford Railway Company bought the Leominster canal and used parts of it as the bed of their railway.<sup>13</sup>

Further east in the Shropshire area, there was intensive activity in the building of tramways to serve the coal mines

<sup>12</sup> Crowther, National Atlas.

<sup>13</sup> C. Hadfield, The Canals of South Wales and the Border (1967) pp. 192-195



and ironworks of the Stour Valley and the Black Country. An early reference to this transport system in the Stourbridge area is found in 1662, when an Act was passed to make the river Stour navigable to the river Severn. Although the original plan included two branch tramways, as far as can be ascertained only one was built which extended from a colliery to the river at a point near Stourbridge.<sup>14</sup>

At the end of the eighteenth century, another tramway was opened in 1799 to serve the coal mines of Henry Vernon at Essington (SJ 9603). This linked the mine to a branch of the Wyrley and Essington canal, probably at Sneyd Farm (SJ 980030). By 1841 this canal branch was being extended towards Cheslyn Hay (SJ 9706). However, it would appear that a tramway was also built from Cheslyn Hay to Great Wyrley which opened in 1842 and was used to carry coal.<sup>15</sup>

During the nineteenth century the number of recorded tramways in Staffordshire and Worcestershire increased considerably. In 1805, one was built to link the town of Stafford to Radford wharf on the Staffordshire and Worcestershire canal, a distance of about 1.5 miles and this became known as The Stafford Railway.<sup>16</sup>

During the 1820's, as various canals were extended

<sup>14</sup> A photograph of the plan was included in Hadfield, Canals of the West Midlands, p. 33 (but no derivation of the plan was given).

<sup>15</sup> Hadfield recorded that the canal extension did not open for traffic until 1860. Hadfield, Canals of the West Midlands, p. 97.

<sup>16</sup> Hadfield recorded that it was sold off in July 1814 when the river Sow was made navigable to the town. Hadfield, Canals of the West Midlands, p. 130.



throughout the Black Country, there was considerable development in the use of tramways to link mines and industrial establishments to the canal system. For example, south-west of the Dudley ridge, mines in the area of Shut End (SJ 9089) and Kingswinford (SJ 8788) were linked by two tramway systems. One of these led westwards through Wallheath to link to the Staffordshire and Worcestershire Canal at Ashwood (SJ 863881). This line, called the Shutt End Railway, was constructed by a company headed by Lord Derby and used a locomotive engine called 'Agenoria' to pull the loaded trucks and negotiate two inclined planes. Another line from the Shut End area led southwards to Brockmoor (SJ 906876) on the Dudley Canal. Hadfield stated that other lines were constructed to the wharfs at Brockmoor.<sup>17</sup>

The Worcester and Birmingham canal was first envisaged in the early 1790's, but by 1797 it had only reached Hopwood Wharf (SP 031749 ?) a distance of about 8 miles (13 km.) which included the King's Norton Tunnel (2726 yards (2429 m.) long). At this point in its route, there were doubts expressed as to the feasibility of further construction because of the difficult terrain it would have to cross. One of the difficulties was the overall fall of about 428 ft. (130 m.) and it was suggested therefore, that a tramway would be a better proposition to complete the route to Worcester. After an abortive attempt to construct a perpendicular lift at Tardebigge the canal was continued, and eventually a stair of twenty-nine locks was built to cover a fall of 217 ft (66 m.).

<sup>17</sup> Hadfield, Canals of the West Midlands, pp. 102-103, 105, and 132.



A further six locks at Stoke Prior created a fall of 42 ft (13 m.) and at Astwood a further five locks added another fall of 42 ft (13 m.).<sup>18</sup>

By 1807, the canal had opened for traffic from Birmingham to Tardebigge (SO 998693) providing a canal link for Bromsgrove, two miles from the town. It was fully opened to Worcester in 1815. From Tardebigge a tramway was built, about 500 yards long, to a nearby quarry, and from 1832 to 1850 another operated from the limestones quarries in Himbleton parish (SO 9458) to the canal, and probably to a wharf near Dunhampstead (SO 919599).<sup>19</sup>

This survey of the tramways constructed between the seventeenth and nineteenth centuries, indicates the importance of providing links between industrial sites and the growing waterway network. In particular, the tramway system was of value for short distance movement of raw materials, such as coal and limestone, from mines and quarries to the processing plants often located alongside the waterways.

By the early nineteenth century, man and horse-power were being replaced by steam-power for the movement of tramway waggons. Initially the motive power was provided by a stationary steam engine which was attached by a series of ropes or chains to the waggons. By 1804 Richard Trevithick had created a steam locomotive for use on the

<sup>18</sup> Pearson's Canal and River Companion, Severn and Avon; featuring the Avon Ring (1995), p. 42.

<sup>19</sup> Hadfield, Canals of the West Midlands, pp. 138 -143.

<sup>20</sup> Hadfield, Canals of the West Midlands, p. 144.



Penydarren tramway in Methyr Tydfil, although it was not a great success. A plaque on the Severn bridge at Bridgnorth records, how in 1808 Richard Trevithick worked with J. U. Raistrick in the building of a passenger locomotive at John Hazeldine's foundry in Bridgnorth. By 1813 the use of steam locomotives had been introduced to the developing tramways in the Newcastle area, and it was there that William Hedley's Puffing Billy was used to effect. In the Shropshire area, the first reference to the use of a locomotive appears to be 1829, for Lord Dudley's tramway called the Shut End Railway.<sup>21</sup>

#### The nineteenth-century canal systems in the Shropshire area.

As Figure 6.2 demonstrates, by the mid-nineteenth century a complex main-line canal network had been built in the Shropshire Area. Most of the canals were concentrated in the triangle between Stafford, Birmingham and Worcester, and served the area known as the Black Country. Shropshire, as a county, was served primarily by the Severn navigation, the Ellesmere Canal, and a branch of the Birmingham and Liverpool Junction Canal, but by now the centre of iron production was shifting from the Shropshire coalfield to the Black Country.

Although canal barges carried a variety of small goods, and some carriers specialized in providing combined road and waterway transport, their main task was the transport of bulk materials such as coal and limestone. This was made clear by Broadbridge in his analysis of the Birmingham canals. He showed that whilst those who controlled the Birmingham Canal Navigation were bankers, professional men, and manufacturers

<sup>21</sup> Buchanan, Industrial Archaeology in Britain pp. 301 and 307; Hadfield, Canals of the West Midlands, p. 132.







like Matthew Boulton and James Watt, the Dudley Canal committee members tended to be land owners and proprietors of coal mines. He quoted from an address to the public on a new canal proposal between Stourbridge and Worcester, in 1786, which indicates the committee members' interests:

'The Proprietors had only the coal trade in view, when they, who have considerable coal works... undertook it... the want of water limits the business, and in the Summer season very little trade can be carried on: But though it does not prove beneficial to the undertakers as Proprietors, yet they being the owners... of coal mines have an ample advantage in the convenience of a Navigation to carry their property to market.' 22

### The nineteenth-century canal and river system in Shropshire

As Figure 6.3 indicates the nineteenth-century main-line canal network tended to avoid rather than serve the interior of the county of Shropshire. The north-west border area was served by the Ellesmere and Montgomery canals, and a canal passed down the eastern side of the county with a link via Newport to Shrewsbury. Although river traffic had declined the river Severn still provided a southerly route from Shrewsbury, and the town retained its economic vigour as an administrative centre and by a widening sphere of influence (see chapter 7 below). For Bridgnorth the development of carpet manufacture in the 1780's, helped to overcome some of the loss of its economic status as a port. 23

22 S. R. Broadbridge, The Birmingham Canal Navigations; vol. I, 1768-1846 (1974) p. 125.

23 M. Wanklyn, 'Urban revival in early modern England: Bridgnorth and the river trade 1660-1800', Midland History, vol XVIII, (1993), pp. 37-64.

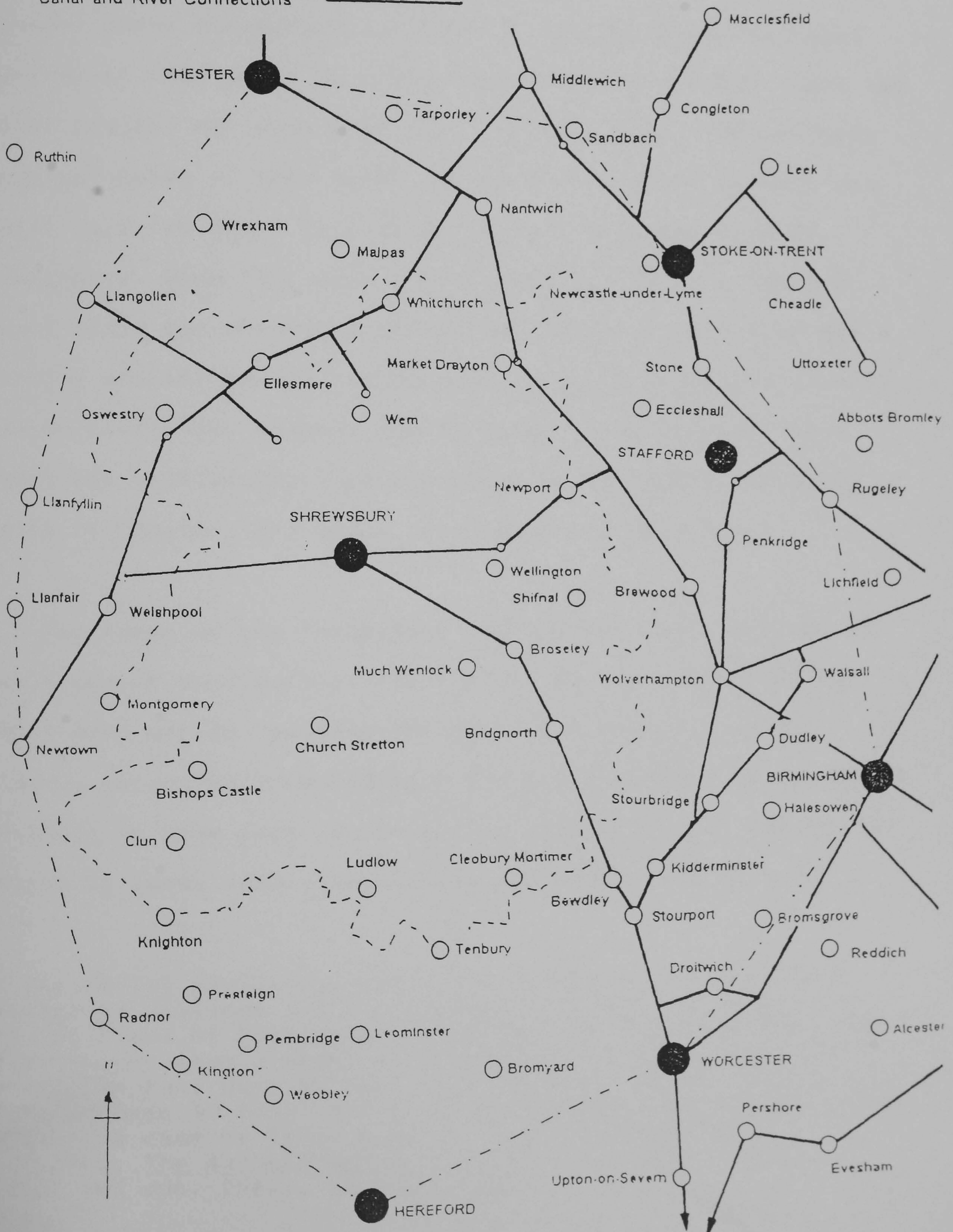


Figure 6.3

## THE SHROPSHIRE AREA

### Waterway Networks in the 19th century

Shropshire Area Boundary  
Shropshire County Boundary  
Canal and River Connections





Just across the western border of Shropshire, the town of Welshpool was served by a wharf at Pool Quay. Hughes stated that a 'New Quay' and waterway settlement had been established at the head of the navigable river Severn by the seventeenth century, but he says: 'Navigation must always have been difficult to Pool Quay as the river has a small and irregular channel above Shrewsbury.'<sup>24</sup> When the Montgomeryshire canal arrived at this point in 1797, some transfer between canal and river traffic was made possible. At this time, the southern terminal point of this canal was Garthmyl, where a wharf was built only two and a half miles (4 km.) from the town of Montgomery. When the canal was extended in 1833, a further canal basin was developed in Newtown which at that time was a growing woollen manufacturing town. Pigot's Directory of 1822 listed fifty-four flannel manufacturers, and recorded that there was both weekly road transport to Liverpool and daily boats to Chester, Ellesmere, Welshpool and Whitchurch.

For towns on the Shropshire 'main-line' canal system, it would appear that much of the traffic was in bulk materials which were merely 'passing-through'. For example, using figures extracted from Hadfield for the Ellesmere Canal, it is possible to show that in the period 1806-1820 over 66% of the weight of goods carried was limestone and coal (Table 6.1).

<sup>24</sup> The Severn navigation had to be terminated at Pool Quay because of shallows and a large weir. Hughes has also shown how, in times of high water, goods were transhipped down the river Vyrnwy from a wharf at Clawdd Coch and then down the Severn. On Pool Quay he says: 'By 1712 one vessel capable of carrying over 40 tons -the Duchess owned by George Bradley was journeying once or twice a month to Bristol and back.'  
S. Hughes, The Archaeology of the Montgomeryshire Canal (1981, 2nd edn. 1983), pp. 109-112.



However as will be demonstrated below, apart from bulk goods being transported from wharfs, such as Lubstree, on the Shropshire coalfield, a considerable traffic developed which supplied various goods to the local trading-community in towns such as Shrewsbury, Newport and Wellington.

Table 6.1 Tonnage carried on Ellesmere Canal, 1806-1820. <sup>25</sup>

Years	Total tons	Limestone tons	Estimated coal tons	Lime and coal % of total
1806-8	46,941	27,315	7,673	75%
1809-11	65,738	38,218	10,735	74%
1812-14	75,217	43,786	12,299	75%
1815-17	56,810	31,478	8,842	71%
1818-20	73,848	38,036	10,684	66%

The last main-line canal which had an effect upon towns in Shropshire, was the Birmingham and Liverpool Junction Canal (B & LJ) designed by Thomas Telford and opened in 1835.<sup>26</sup> The primary purpose of this canal was to provide a faster waterway link between the Birmingham and Black Country canal system and the Mersey, and thus with Liverpool and Manchester. A connection was made to the Chester and the Ellesmere canals at

<sup>25</sup> Whilst in his table Hadfield only gives details of limestone tonnage, in the text he adds that in 1806, in addition to the 24,082 tons of limestone, another 6,757 tons of coal slack was carried to burn it giving a ratio of 3.56 tons of coal for every ton of limestone processed. This ratio has been used in the table above to estimate the coal tonnage carried. Hadfield, Canals of the West Midlands, p. 193.

<sup>26</sup> In comparison with other main-line canals Telford's last canal was built to a very high standard and could be described as the 'Motorway of Canals'. Using the techniques of cuttings and embankments, which were to become the standard for railways, the need for time-consuming locks was reduced to a minimum. Also the canal's dimensions enabled it to take the largest boats then operating on the canal system. I.A. Video Recordings, 'Telford's Last Canal.' (1983).



Hurleston Junction, and eventually in 1845 the B & LJ canal company was merged with other companies in the area to form the Shropshire Union Canal Co. The link provided by the B & LJ created a more direct route for the industries which were developing on the Ellesmere and Montgomeryshire canals, to Birmingham, the Black Country and southwards to London.<sup>27</sup>

Apart from this connexion to the Ellesmere and Chester Canals, a branch of the B & LJ was planned to link it from Gnosall Heath to the Donnington Wood Canal at its terminus on the Duke of Sutherland's estate (SJ 755171). Apart from this the main-line of the canal was planned to pass east of the village of Norbury, following the contours of land as far as possible and therefore to limit the need for deep cuttings and embankments.<sup>28</sup> However, a new route planned in 1826 which according to Rolt was 'made on the insistence of Lord Anson of Norbury Park who refused to allow the canal to cut through his game preserves in Shelmore Wood.'<sup>29</sup> However this statement is not supported by the two plans, as the original route was

<sup>27</sup> Before 1833 when a link had been established between the Chester Canal and the Trent and Mersey canal at Middlewich the only connection from this canal to the Midlands and London had been via the Mersey. Even when this link via Middlewich was established, narrow-boats bound for the Birmingham area still had to negotiate a long section of the Trent and Mersey canal from Middlewich to Great Wyrley and then via the Staffordshire and Worcestershire canal to Autherley Junction. Progress on these canals was slow, with the long Harecastle Tunnel and many locks to negotiate. From personal experience of navigating on both this and the route via the Birmingham and Liverpool Junction Canal I can appreciate the advantages that the new route provided.

<sup>28</sup> Based upon a study of the original plans for this canal deposited at the Staffordshire record office, Q/RUm/57 (1825), Q/RUm/60 (1826) and Q/RUm/61 (1826) and the Norbury Tithe Map (1835) D(W) 1718/16-18, USR SH1; and fieldwork in Norbury.

<sup>29</sup> L. T. C. Rolt, Thomas Telford (1958 repub. Penguin 1975), p. 190.



about half a mile east of Shelmore Wood! Eventually the route adopted was one which required not only a deep cutting north of Norbury but also the building of the Shelmore Embankment skirting Shelmore Wood (SJ 795225 - SJ 806214) which proved very unstable and greatly delayed the opening of the canal.<sup>30</sup>

This second adopted plan provided a branch from Norbury which passed through Newport and met the existing Shrewsbury canal at Wappenshall wharf (SJ 664145) only two miles (3 km.) from Wellington. Therefore by 1835 the towns of Newport and Wellington were linked to the major canal system, and by upgrading the Shrewsbury canal the town of Shrewsbury was provided with a link to the main canal system. A sub-branch from this canal, known as the Humber Arm terminated in a wharf at Lubstree (SJ 693153), which was linked to the Leveson-Gower's industrial enterprises by a tramway. This provided a vital link for the export of coal, limestone and iron products; for example, the Lubstree wharf book shows that between the 9th and 23rd May 1844 twenty tons of coal and 180 tons of pig-iron were shipped outward.<sup>31</sup> Another wharf book, applies to Wappenshall, it shows a variety of goods being brought into the area. On the 23rd May 1839 a boat belonging to the carrier Crowley and Co. arrived with consignments from

<sup>30</sup> From a study of the landscape in Norbury it is probable that the deviation was due to the fact that the original route would have run into difficulties caused by peat-filled kettle holes. However the move westwards of Shelmore Wood also ran into difficulties because it was built on the edge of what had probably been a peat moss. It needs to be appreciated that, at this period, there was virtually no understanding of geology based upon the ice-ages. Geologists were learning from canal builders for example, men such as William Smith (1769-1839) was a civil engineer and a geologist. S. Lee, (ed), Dictionary of National Biography, Vol. LIII (1898) p.

<sup>31</sup> Lubstree Wharf Book. SRRC 673/7/1.



London and Wolverhampton with goods for:

William Walmsley	of Wellington	6 po hops and 1 pack GP.
J. Webb	" "	1 bale of leather.
S. Moore	" "	20 packages GP.
J. Whitfield	" "	1 cask.
Jn Webb	" "	1 box of tin.
J Mansell	" Wappenshall	8 boxes.
R. Evans	" Priorslee	2 ?? of tallow. <sup>32</sup>

In the month of June 1839 the records show eighty-three boats landing consignments at the same wharf from:

Ashton (1)	Bilston (1)	Birmingham (31)	Chester (7)
Derby (1)	Ellesmere Port (22)	Kidderminster (1)	
Leeds (7)	Leicester (1)	Liverpool (12)	London (10)
Manchester (27)	Middlewich (1)	Nantwich (3)	Newport (1)
Oxford (1)	Shrewsbury (2)	Southport (1)	Stoke (3)
Stockton (2)	Tipton (9)	Wappenshall (13)	
Wolverhampton (27)	Worcester 1.		

These examples show how the canal system that linked Shrewsbury, Newport and Wellington, to the main-line canals provided a wide ranging waterway link for these towns in the nineteenth-century, allowing a variety of goods to be transported to towns, apart from bulk transport of raw materials.<sup>33</sup> Therefore when the railways were being built the canal network was already providing some trading communities in Shropshire with a valuable transport network and similar advantages must have accrued in other towns with canal wharfs, like Market Drayton, Whitchurch, Ellesmere and Oswestry.

<sup>32</sup> In the lists GP appears to refer to general produce. The carriers listed in this period included Crowley & Co., Tilston & Co., Pickford & Co., Whitehouse & Co., The Neptune Boat Co. and Henshall & Co., all major companies who operated throughout the 'Shropshire Area' and further afield. Wappenshall Wharf Book, SRRC 673/7/2.

<sup>33</sup> A number of local road-carriers provided a service that linked Wappenshall Wharf with a number of destinations in the coalfield area. Further research using the wharf books could provide a more detailed picture of the type of goods transported to Shropshire towns in this period.



The coming of the railway to the Shropshire area.

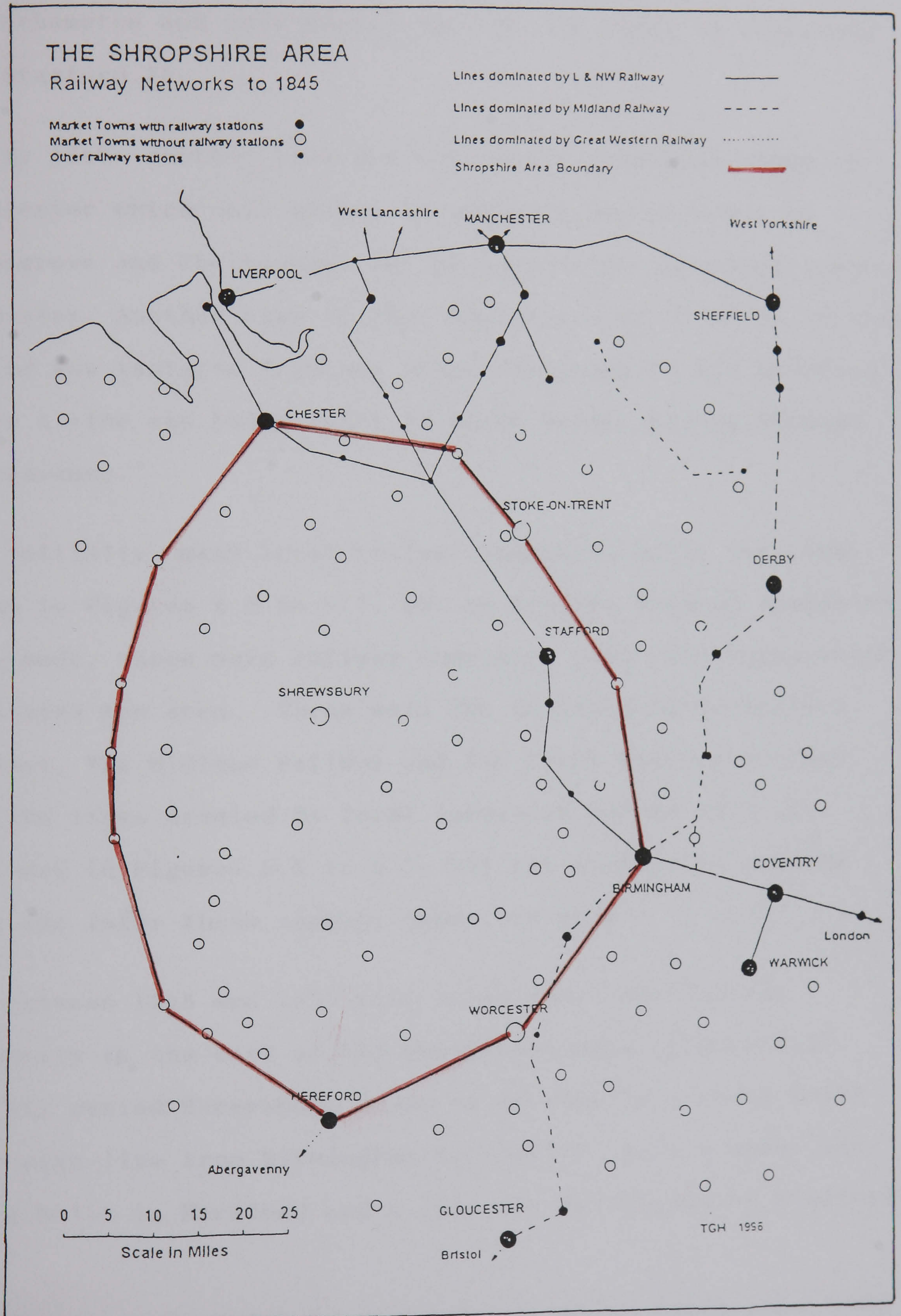
It has been noted above, that the main-line canals provided a national network, and that apart from their purpose to carry raw materials for industry they also carried a range to goods for the trading communities in Shropshire towns. Further, it has been discussed how tramways were constructed to connect mines and quarries to the canal network. When the first railways were built, the owners recognized that the new steam technology of locomotives could be used to meet the demand for the bulk transport of raw materials and also the growing demand to convey passengers.

By combining data from a range of books and maps, it has been possible to plot the developments in the railway network which affected the Shropshire area.<sup>34</sup> To the north a railway line was opened between Liverpool and Manchester in 1830, with a branch southwards to Warrington in 1831. In 1837, the London and Birmingham and Grand Junction Railways were opened. These two companies provided a line that linked London and Birmingham to Liverpool and Manchester via the branch from Warrington (Figure 6.4). On this line the new settlement of Crewe, was built from which branches were developed to Chester

<sup>34</sup> P. E. Baughan, A Regional History of the Railways of Great Britain, vol. 11 (1991); R. Christiansen, A Regional History of the Railways of Great Britain, vol. 7, The West Midlands (1973); R. Christiansen, A Regional History of the Railways of Great Britain, Vol. 13, Thames & Severn (1981); G. O. Holt, A Regional History of the Railways of Great Britain, vol. 10, The North West (1978); L. James, A Chronology of the Construction of Britain's Railways, 1778-1855 (1983); R. Leleux, A Regional History of the Railways of Great Britain, vol. 9, The East Midlands (1984). Like the reference to Hadfield's works on canals, the details in the above lists can be regarded as a primary source when building a picture of a developing network.



Figure 6.4





and direct to Manchester by 1845. However the Grand Junction line avoided, rather than linked, existing market towns, and on its route from Birmingham to Warrington by-passed Wolverhampton and only passed through the towns of Penkridge and Stafford.<sup>35</sup>

By 1845, another line had been built from Birmingham to Gloucester which only passed through the market towns of Bromsgrove and Cheltenham, but by-passed the important town of Worcester. Another town in the 'Shropshire Area' which at this period was isolated from any other developments was Hereford, where a line was being built to south Wales passing through Abergavenny.

Initially, many local railway companies built the lines shown in Figures 6.5 to 6.7, but as mergers between companies were made, three main railway companies came into being which dominated the area. These were The London & North-Western Railway, The Midland Railway and The Great Western Railway. All the lines created by local companies before 1875 are included in Figures 6.5 to 6.7, but for clarity of mapping only the later three company names are used.

Between 1845 and 1855 many lines were constructed, primarily in the east of the Shropshire area (Figure 6.5). In this period Shrewsbury began to develop as a nodal point on a main-line from Birmingham to Chester, with a main-line being built to Hereford and a line via Wellington to Stafford.

<sup>35</sup> Stations were built in rural locations to serve some towns such as Whitmore (SJ 7940) which for a time was the nearest station to Market Drayton and Newcastle under Lyme, and was the focus for a number of carrier and omnibus routes, see chapter 7 below.



Figure 6.5

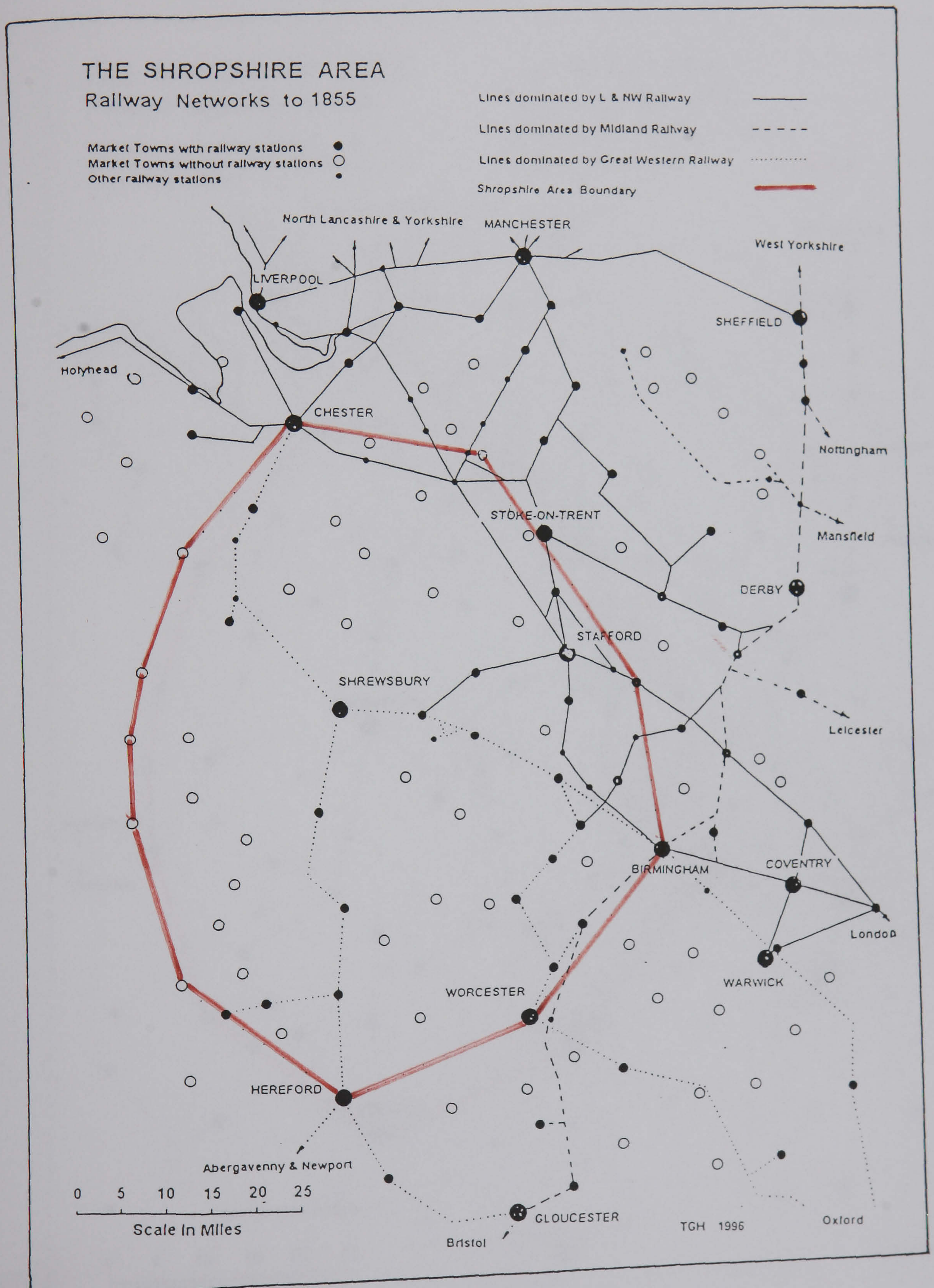




Figure 6.6

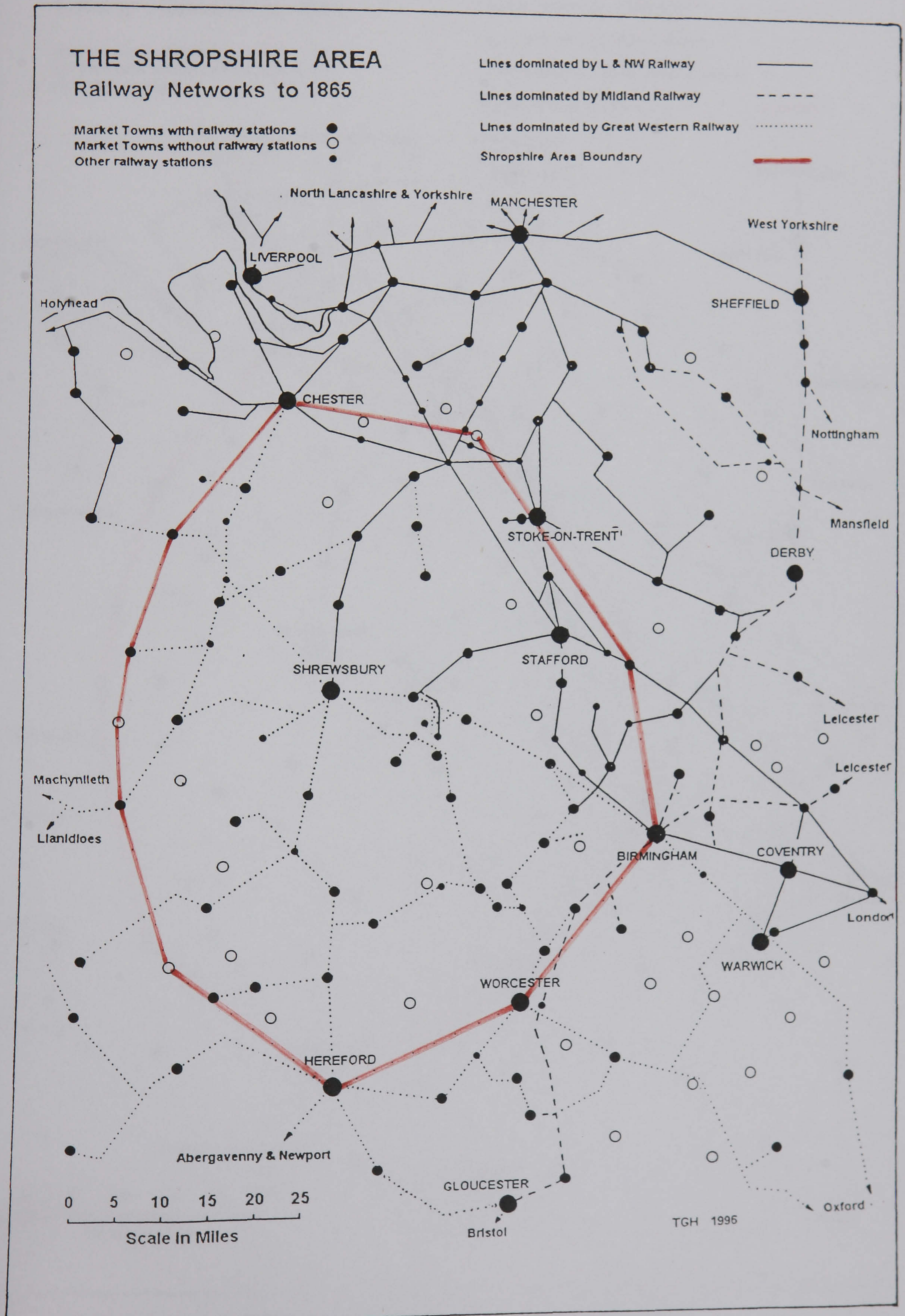
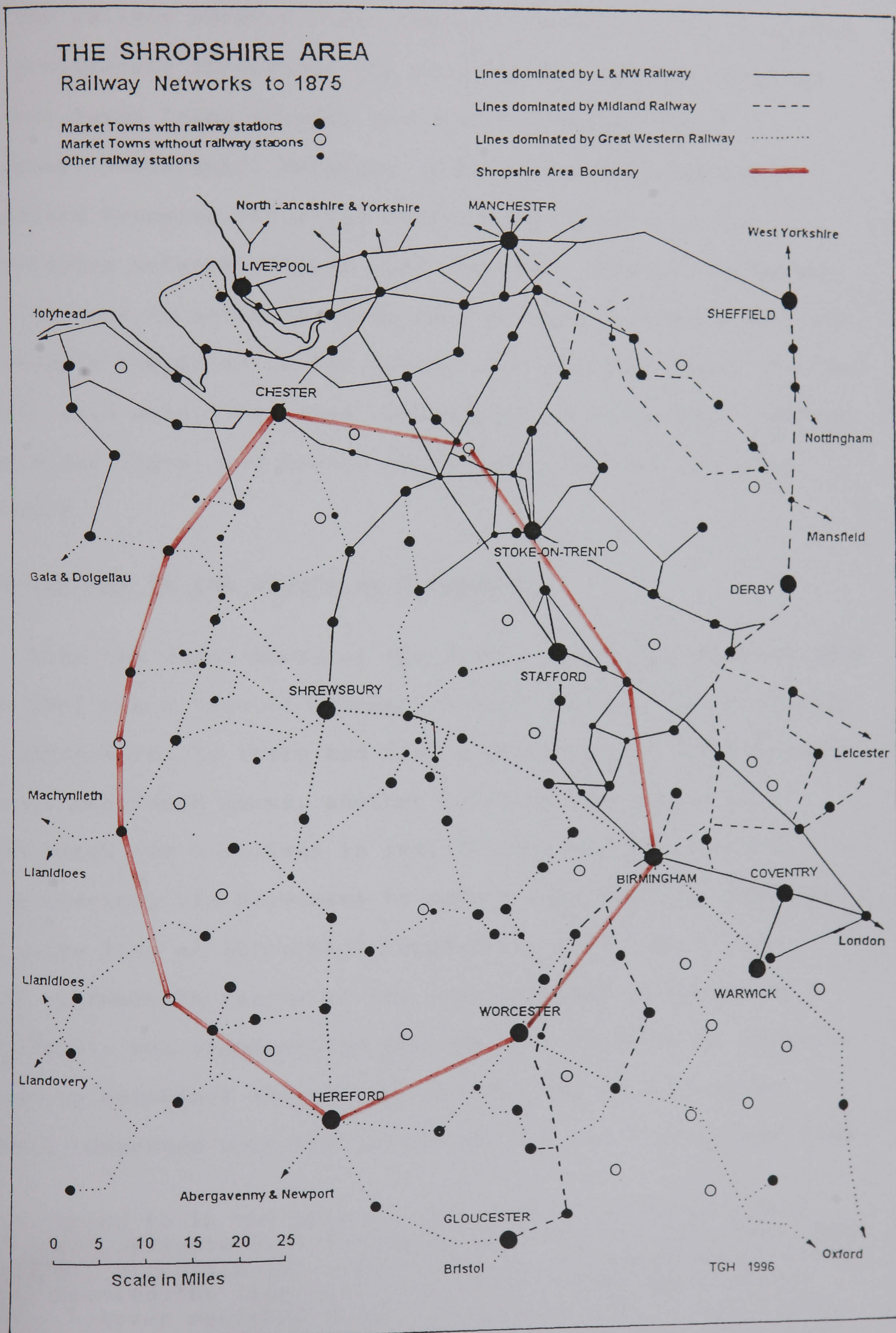




Figure 6.7





Unlike the earlier lines which had tended to avoid towns by 1855 twenty-seven towns in the Shropshire area were served by the railway network. Over the next decade, lines continued to proliferate throughout the area, with a further eighteen market towns being served, and with the larger towns of Chester, Shrewsbury, Hereford, Worcester, Birmingham and Stafford becoming important inter-change points in the developing network (Figure 6.6). The rail network, which was to continue to serve the area for the next hundred years, was virtually completed in the twenty year period between 1845 and 1865, with main-lines that linked provincial centres together and minor lines, and branch lines, that fed into the main network.

#### The railway in the county of Shropshire.

Like the canal mania of the 1790's the period between 1855 and 1865 was a time of intense railway activity in the county of Shropshire. As there had been a petition for the Ellesmere canal, mentioned above, another petition was raised in Whitchurch for a railway in 1861.<sup>36</sup> This was for a route from Oswestry via Ellesmere to make a link with the Shrewsbury to Crewe line at Whitchurch (opened in 1858). Those who gave evidence in favour of the line included the mayor of Welshpool, who commented on how the line would be of value to trade in Welshpool and the surrounding agricultural area. Others commented upon the advantage that would be gained from

<sup>36</sup> Referred to in the minutes of the House of Lords Select Committee, Private Bill Evidence, Railways etc 1846-1899, Part IV, SRRC, Microfilm 105 (1861). Various witnesses were called who supported the line as a benefit for trade and industry. Others however resisted it on the grounds that it would pass through or near their private estates and disturb their game birds, their deer or cattle.



the distribution of limestone, in spite of the movement of this commodity by the existing distribution of this commodity by the canal system. However witnesses who had not mentioned the canal when cross-questioned argued that the Canal Co. had a monopoly.<sup>37</sup> Some commented upon the coal trade, and it appeared that coal from the Lancashire coalfield was preferred to that from Ruabon, because it had a lower sulphur content.

The evidence given to justify this railway link also cast light on the pattern of agricultural marketing from the Oswestry and Ellesmere areas. A number of witnesses referred to the cattle trade; for example Mr. George Wilditch, an estate agent and farmer's son, commented on how cattle were marketed in a north-eastern direction towards north Staffordshire and east Cheshire in preference to south-easterly to Shrewsbury. As will be discussed in chapter seven, marketing in the agricultural trade covered a far larger area than the hinterland of a market town.<sup>38</sup>

By 1875 the county of Shropshire was covered by an extensive network of railway (Figure 6.7) and this network was linked to a wider area on all sides of the county. However

<sup>37</sup> Mr. Thomas Lidall of Newcastle-under-Lyme the representative of the Iron Master's Association of North Staffordshire commented that in his area eleven to thirteen hundred-weights of lime were required for smelting every ton of iron and said that in his area the annual output of iron was in excess of 700,000 tons. He argued that bringing limestone by rail from north-west Shropshire would reduce the cost of iron production in his area. He and the mayor of Welshpool also commented that this railway line would give easy access for many people from the north-Midlands to the coastal resorts of mid-Wales.

<sup>38</sup> On the subject of the distribution of cattle Howell also commented upon how the railways, which in this period were penetrating mid-Wales. He indicated the traditional methods of buying and selling cattle were affected resulting in the decline of cattle fairs and the droving trade. D. W. Howell, Land and People in Nineteenth-century Wales (1977), p. 122.



some towns such as Bridgnorth were quite late in achieving a rail link and, as will be discussed in chapter seven below, some doubt has been expressed whether any advantage was gained by it when it did arrive. Although by 1875 the network was extensive, some market towns in the Shropshire area were still isolated from a railway line. In Shropshire it was Clun, and to some extent Cleobury Mortimer; in Herefordshire it was Bromyard and Weobley and in Staffordshire it was Brewood, Eccleshall and Halesowen. Surprisingly Halesowen, in spite of its position on the edge of the Black Country, where many lines had been built, did not achieve a line until 1882. In Cheshire, the market towns of Malpas, Tarporley and Sandbach were by-passed, although stations were built on nearby lines to serve these towns.

#### From tramways to railways - some conclusions.

This chapter has indicated, how the growing need for an efficient industrial transport system led to the development of tramways linking mines and industrial premises to canals and navigable rivers, and how the new technology of steam locomotives used on these tramways led to the development of main-line railways. The analysis of road carrying in the previous chapter demonstrated how a sophisticated road system had been developed and how some 'national' carriers had, in the early nineteenth century, formed partnerships with waterway carriers. It has also shown how some of the 'national' carriers' owned their own warehouses, and how in the short space of twenty years between the 1850's and 1870's this national road system of distribution was superseded by the railway. Not all



road-carriers succumbed to this change for companies like Pickfords and Crowley & Co., became railway agents and used their road vehicles to service railway stations.

In the nineteenth century the new transport networks which served most towns in the Shropshire area were linked into a country-wide system. This allowed for the speedy delivery of raw materials, machines from specialist manufacturers, retail and fashion goods and of course passengers. In Shropshire some towns were served by main-line canals and others, like Shrewsbury and Oswestry became the centre of an extensive railway network, however other towns like Clun remained isolated. Some towns, like Oswestry developed new industries based upon the railway, others like Shifnal were unable to take full advantage of the new system.<sup>39</sup> The changing pattern of transport systems and when they affected each Shropshire town (and towns on the county border) is shown in Table 6.2 and the likely impact of these changes is explored in chapter seven below, with particular reference to changes in population and the trading function of the towns.

<sup>39</sup> Apart from its link with the Great Western main-line the town of Oswestry became the headquarters of the Cambrian Railway Co., which built extensive works in the town to service the trains on their many branch lines. In Shifnal the railway crossed a wide saucer-shaped valley and the station was built on a viaduct that crossed the centre of the town. As a result few siding were possible and little industry developed, but as will be shown below one local entrepreneur did develop a business in small hand and horse-drawn carts as a result of the distribution network provided by the railway.



Table 6.2

TOWNS SERVING THE COUNTY OF SHROPSHIRE - TYPE OF TRANSPORT BY PERIOD  
(Each \* indicates the type of transport - includes towns on the county boundary).

TOWN	1820's		1830's		1840's		1850's		1860's		1870's	
	ROAD	WATER RAIL	ROAD	WATER RAIL	ROAD	WATER RAIL	ROAD	WATER RAIL	ROAD	WATER RAIL	ROAD	WATER RAIL
BENDLEY	*	*	*	*	*	*	*	*	*	*	*	*
BISHOPS CASTLE	*		*		*		*		*		*	
BRIDGNORTH	*	*	*	*	*	*	*	*	*	*	*	*
BROSELEY/IRONBRIDGE	*	*	*	*	*	*	*	*	*	*	*	*
CLEOBURY MORTIMER	*		*		*		*		*		*	
CLUN					*		*		*		*	
DRAYTON	*		*		*	*	*	*	*	*	*	*
ELLESMERE	*	*	*	*	*	*	*	*	*	*	*	*
KNIGHTON	*		*		*		*		*		*	
LUDLOW	*	*	*	*	*	*	*	*	*	*	*	*
MONTGOMERY	*		*		*		*		*		*	
NEWPORT	*		*		*	*	*	*	*	*	*	*
OSWESTRY	*		*	*	*	*	*	*	*	*	*	*
SHIFNAL	*		*		*	*	*	*	*	*	*	*
SHREWSBURY	*	*	*	*	*	*	*	*	*	*	*	*
STRETTON	*		*		*		*		*		*	
TENBURY	*		*		*		*		*		*	
WELLINGTON	*	*	*	*	*	*	*	*	*	*	*	*
WEM	*		*		*	*	*	*	*	*	*	*
WENLOCK	*		*		*	*	*	*	*	*	*	*
WHITCHURCH	*	*	*	*	*	*	*	*	*	*	*	*
NUMBER OF TOWNS SERVED	20	6	0	0	21	11	0	21	11	11	14	20



## CHAPTER 7

### TOWNS IN THE COUNTY OF SHROPSHIRE: THEIR CHANGING POPULATION, FUNCTIONS AND TRANSPORT SYSTEMS.

In the previous chapters of this thesis the historical and technological development of transport systems in the Shropshire area were explored. This indicated that the people who lived and worked in both towns and rural areas were linked to other parts of Britain by various transport networks. This chapter will study the county of Shropshire, and will consider how the changes in transport technology affected the towns in this county in the nineteenth century.

The nineteenth century was a time of expanding population and increasing economic activity, and these two factors will be explored in relation to changing transport systems. The techniques chosen for this analysis are based upon the methods used by Lewis, who studied the changes in urban status towns in the middle Welsh borderland.<sup>1</sup> To provide the data for this analysis, two further computer databases were created:

1) **Population Statistics:** These were extracted for every parish and township in Shropshire from the Shropshire Victoria County History Vol. 2 (1973) and from the original Census Reports. The figures extracted covered the period 1801 to 1871 and also included the acreage figures extracted from the 1851 Census Report.

2) **Town Trading Functions:** The number of entries for each trade in each Shropshire town, were extracted from a single trade directory in each of the sub-periods used to study the 19th century transport systems in chapter 5.

<sup>1</sup> C. R. Lewis, 'The analysis of changes in urban status: a case study in Mid-Wales and the middle Welsh Borderland', Transactions of the Institute of British Geographers, vol. 64 (1975), pp. 49-65.



The rise of town populations in Shropshire.

Based upon Tiller's work, Table 7.1 indicates that there was a considerable increase in the number of towns with large populations in England between 1801 and 1891. She also calculated that the percentage of the total population living in urban centres changed from 26.8% in 1801 to 72.0% in 1891.<sup>2</sup>

Table 7.1 The number of towns and their population sizes in nineteenth-century England, compared to the number of similar size towns in Shropshire up to 1871.

Town Size (1,000s)	1801 No. of towns	1851 No. of towns	1891 No. of towns
20 +	15	63	185
10 - 20	31	60	175
5 - 10	60	140	262

Town Size (1,000s)	1801 No. of towns Shropshire	1851 No. of towns Shropshire	1871 No. of towns Shropshire
20 +	0	1	1
10 - 20	1	1	2
5 - 10	3	6	5

Notes: Extracted from Table 1 in Tiller, English Local History (1992), p. 178. Because the period studied in this thesis ends in 1871 the above figures for Shropshire towns relate to 1871 not 1891.

In Shropshire by 1891 only the county town of Shrewsbury had a population in excess of 20,000 (an increase of 83%, from 14,739 in 1801 to 26,967 in 1891). In 1801 three towns, Wellington, Oswestry and Ellesmere had populations of between

<sup>2</sup> K. Tiller, English Local History; an introduction (1992). p. 188.



5 - 10,000. By 1851 Shrewsbury had attained a population in excess of 20,000 and in 1871 was still the only Shropshire town in that category. By 1871 two towns, Wellington and Oswestry, had moved into the 10 - 20,000 category and five towns Shifnal, Whitchurch, Ellesmere, Bridgnorth and Ludlow were in the 5 -10,000 category. It is clear therefore, that to some extent, the national trend was being followed in Shropshire.

Population figures can however be misleading. For example, the small town of Shifnal is recorded with a population of 6,681 in 1871, and therefore headed the 5 -10,000 category. This figure included the population of the heavily industrialized township and chapelry of Priorslee, located on the East-Shropshire coalfield, and which by 1901 had become a separate civil-parish. By 1871, Priorslee was within the hinterland of a new market-centre based on the industrial village of Oakengates, and therefore no longer related to Shifnal in economic terms. If Priorslee is discounted from Shifnal the 1871 population falls to 3,359, which relates more closely to the economic function of the town.

Other industrial villages with a high population density also existed in the area between the ancient market towns of Wellington, Shifnal and Broseley. This demonstrated why it was important to consider changes in the number of market centres and their hinterlands in a study which compared changes in population to changes in trading functions.

As Table 7.2 shows, in seventeenth-century Shropshire there were sixteen recorded market centres in operation. In



Table 7.2

SHROPSHIRE MARKET TOWNS & CENTRES 17th - 19th CENTURY (showing market days where known)

Market Centre	1693	1724	1745	1769	1784	1792	1835	1851	1870/1
BISHOPS CASTLE	*	*	F	*	?	[fm]	F	F[f]	F[f]
BRIDGNORTH	*	*	S	*	S	[fm]	S	S[f]	S[f]
BROSELEY	---	---	W	---	---	---	W	W[f]	[f]
CHURCH STRETTON	*	*	Th	*	Th	[fm]	Th	Th[f]	Th[f]
CLEOBURY MORTIMER	*	?	W	*	Th	[fm]	W	W[f] <sup>1</sup>	W[f]
CLUN	---	---	---	---	---	[f]	---	T[f]	T[f]
DAWLEY	---	---	---	---	---	---	---	---	W[f] <sup>2</sup>
DRAYTON	*	*	W	*	W	[fm]	W	W[f]	W[f]
ELLESMERE	*	*	T	*	T	[fm]	T	T[f]	T[f]
HODNET	*	---	---	---	---	---	---	[f]	[f]
IRONBRIDGE	---	---	---	---	---	---	F	F	F
LUDLOW	*	*	M	*	M	[fm]	MWFS	MWFS[f]	MS[f]
MADELEY	---	---	---	---	---	---	---	[f]	[f] <sup>4</sup>
MUCH WENLOCK	*	*	M	*	M	[fm]	M	M[f]	M[f]
NEWPORT	*	*	S	*	S	[fm]	S <sup>5</sup>	S	S
OAKENGATES	---	---	---	---	---	---	---	S <sup>6</sup>	S
OSWESTRY	*	*	WS	*	W	[fm]	WS	W[f]	WS[f]
SHIFNAL	*	?	F	*	---	[fm]	T	T[f]	T[f]
SHREWSBURY	*	*	WThS	*	WFS	[fm]	WS	WS[f]	WS[f] <sup>7</sup>
WELLINGTON	*	?	Th	*	Th	[fm]	Th	Th[f]	Th[f]
WEM	*	*	---	*	Th	[f]	Th	Th[f]	Th[F]
WHITCHURCH	*	*	F	*	F	[fm]	F	F[f]	F[f]

Key: Market Days M - Monday, T - Tuesday, W - Wednesday, Th - Thursday, F - Friday, S - Saturday.

\* Listed as a market centre, f - fair, m - market.

Sources: G.M. New State of England (1693), Herman Moll's map of market towns (1724), Owen's New Book of Fairs (1745), England Displayed (1769), The New British Traveller (c1784), Owen's New Book of Fairs (1792), Pigot's Directory of Shropshire (1835), Bagshaw's Directory of Shropshire (1851), Kelly's Post Office Directory of Shropshire (1870), Cassey's Directory of Shropshire (1871).

Notes: <sup>1</sup> Modern Market Hall; <sup>2</sup> Market Hall erected 1867; <sup>3</sup> Madeley market revived 1763 with new market house built at Ironbridge; <sup>4</sup> New Market Hall erected 1870, but no market day listed; <sup>5</sup> Cattle Market alternate T. <sup>6</sup> Market established 1826 but not mentioned in earlier directories; <sup>7</sup> Cattle Market alternate T.



the eighteenth century the market at Hodnet failed, but markets in the towns of Clun and Broseley appear in the listings. In 1763 a new market house was built at Ironbridge in the parish of Madeley, on the north side of the River Severn, and a market day established on a Friday.<sup>3</sup> 'The Ironbridge' itself was opened in 1779 connecting the north and south bank of the River Severn. This was probably a factor in the decline of the market in Broseley (on the south side of the river). Bagshaw's Shropshire Directory (1851) listed Broseley market on a Wednesday but commented: 'it is not very numerously attended'.

The next market centre to be established was at Oakengates in 1826, with a market day on Saturdays, although it does not appear in local directories until 1851. In Dawley a market-hall was built in 1867 and its market day is listed, from 1871, as Wednesday. Cassey's Shropshire Directory (1871) stated that in Madeley: 'A commodious and spacious market hall, covered with galvanized iron, was erected in the year 1870', but it does not state a market day. As this market hall was erected at the end of the period covered by this thesis, Ironbridge and Madeley will be counted as one centre unless otherwise stated. Therefore, there were seventeen market centres in operation in 1835 and twenty in 1871.<sup>4</sup>

<sup>3</sup> Madeley was originally a town within the Franchise of Wenlock. The Prior of Wenlock had been granted a market on a Tuesday by a charter of 1268/69 (53rd Henry III). The Madeley market ceased when the town was destroyed in the Civil War.

<sup>4</sup> The seventeen ancient market towns were Bishop's Castle, Bridgnorth, Broseley, Church Stretton, Cleobury Mortimer, Clun, Drayton (Market), Ellesmere, Ludlow, Much Wenlock, Newport, Oswestry, Shifnal, Shrewsbury, Wellington, Wem and Whitchurch to which was added the revived market at Ironbridge. In the nineteenth century Oakengates and Dawley were added.



It has been noted above, that an industrialized area within an otherwise rural or town parish, like Priorslee, can create a false picture of the population. If the population and the function of towns are to be compared, due cognizance must be taken of the make-up of each parish within a particular town's hinterland. Therefore, before an analysis could be undertaken it was necessary to identify the relevant market centres and which parishes were to be classified as industrial or rural.

One of the aims of the 1801 census was to collect information on the occupational structure of parishes. The census collectors were asked to divide the numbers of persons employed in each parish or township into three classes: agriculture; trade, manufacture and handicrafts; and all other persons not comprised in these two classes. However Bellamy in her study entitled 'Occupation statistics in the nineteenth-century census' has stated that the information collected was generally unsatisfactory.<sup>5</sup> Of the 213 parishes or townships listed in the 1801 Census Report for Shropshire, there were eight entries (4%) in which the figures contained in the three occupational columns did not equal the total population. By studying all the entries, it became clear that there was also confusion over what should have been included in the last two classes.<sup>6</sup>

<sup>5</sup> J. M. Bellamy, 'Occupation Statistics in the Nineteenth Century Censuses' in R. Lawton, ed., The Census and Social Structure (1978), p. 165.

<sup>6</sup> Ellesmere was recorded as 795 agriculture, 278 trade and 92 others. However the population total was 5,553, it appears that the trading population was under-recorded, but the figure for agricultural is considered to be fairly accurate as this town was at the centre of a large rural parish.



With the caveat that care should be taken when using the occupational data from the 1801 census report, a reasonable estimate was made of the percentage of the total population who were employed in agriculture. This was undertaken and showed a range from 0.5% in Wombridge to 100% in the parishes of Myndtown, Sibdon Carwood and Upton Cresset. To ascertain the geographic spread of industrial activity in the county, a map was created showing the parishes which had less than 50% of the population engaged in agriculture (Figure. 7.1). This suggested that industrial activity existed in most town parishes and also in some rural areas apart from Ironbridge Gorge and Coalbrookdale, which have hitherto been recognized as the industrial heart-land of Shropshire. This analysis demonstrated a need for further data to assess which parishes contained industrial activity, and how that activity may have changed throughout the period 1801-1871. To study this aspect, three further databases were constructed which included the following data:

1) The numbers of persons listed in each trade in S. Bagshaw, History, Gazetteer and Directory of Shropshire (1851). (hereafter referred to as Bagshaw's Shropshire Directory (1851)). This is the first Shropshire directory to give data for every parish.

2) The numbers of persons listed in each trade in E. Cassey & Co., History, Gazetteer and Directory of Shropshire (hereafter referred to as Cassey's Shropshire Directory (1871)). This database contained the same format of data as in the database of town trading functions mentioned on page 316 above.

3) Information on the location of industrial sites within parishes throughout Shropshire which were functioning in the 1800 - 1870's period. This was culled from various articles, maps, reports, and books such as: A. Pearce (ed.) Mining in Shropshire (1995); G. Tucker, Some Watermills of South-west Shropshire (1991); N. Mutton, 'Eardington Forges and Canal Tunnel' Industrial Archaeology, vol. 7 No. 1 (1970), pp. 53-59.



Figure 7.1

# CHROPSHIRE PARISHES

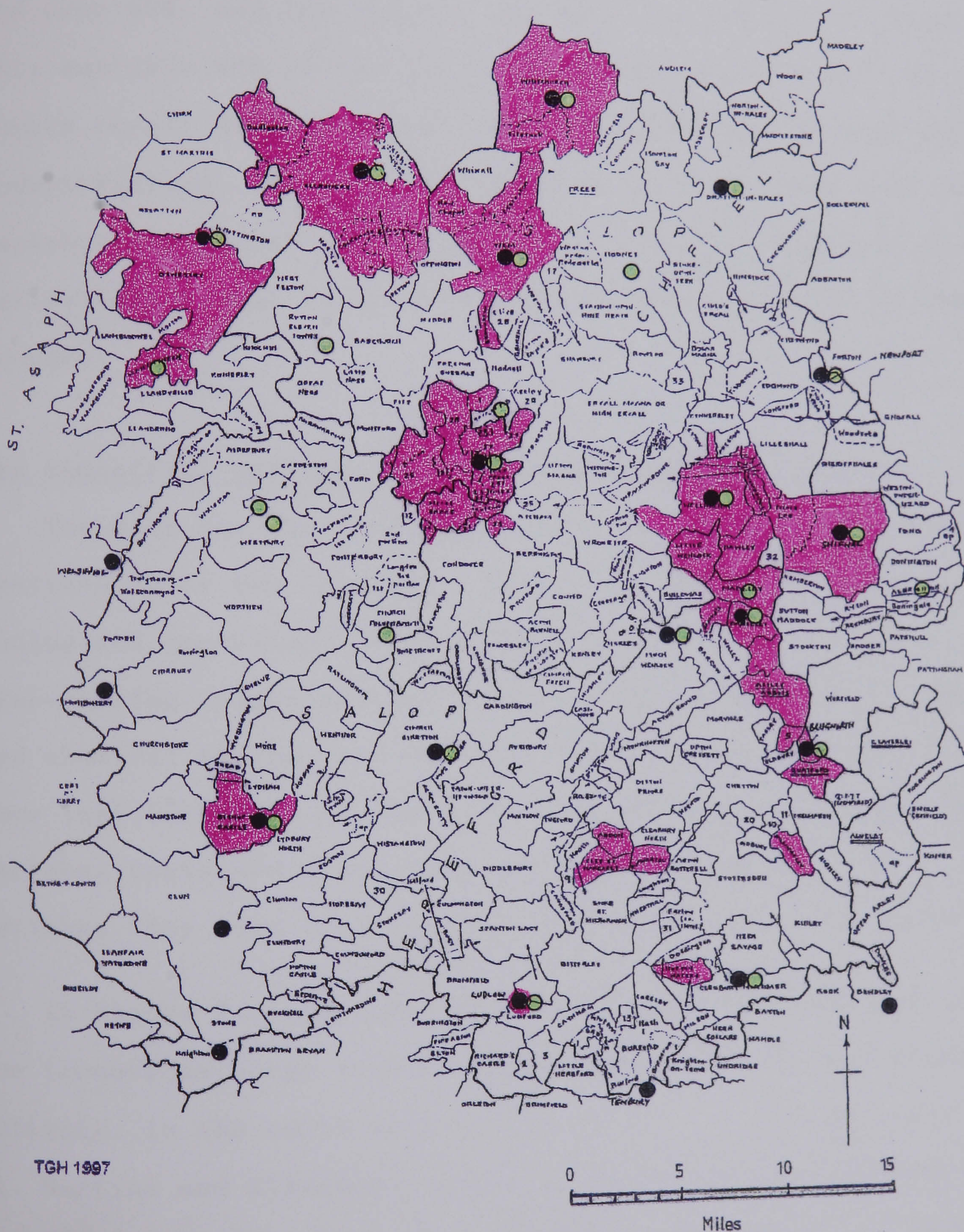
Areas where less than 50% of the population were employed in agriculture in the 1801 census

Markets ●

Fairs ●

Based upon a map of Shropshire's Ancient Parishes  
by R. Morgan, Shropshire Records Office (1993).

Markets and Fairs from Thompson's Memorandum Book (1836)





These databases were used to identify which parishes contained some form of industrial activity. The 213 parishes were then identified under three headings, town parishes, rural parishes and industrial parishes. For comparative purposes the agricultural population percentages were divided into four bands; parishes with under 15%, 16 - 20%, 30 - 59% and over 60%, and the results are shown as Table 7.3. From this analysis 60% of the parishes in 1801 were identified as purely rural, 8% were market towns and 32% were in some way industrialized. The figures suggested however, that even in parishes where over 31% of the population were employed in agricultural, some industrial activity was also part of their economy.

#### The industrial parishes of the early nineteenth century.

The data for the town and industrial parishes were further analysed under two headings; extractive industries (i.e., mining and quarrying) and manufacturing industries (i.e., iron-working, paper making, brick & tile making, china, glass and chemical making, and tanning). The results in Table 7.4. show that forty-one of the industrial parishes and eight town parishes contained mines or quarries, although in town parishes they were located away from the actual town centre.

As Figure 7.2 indicates there were many parishes outside the Ironbridge Gorge area in which there was some industrial activity. In the north-west of the county, in the parishes of St. Martins and Ellesmere, coal was mined from the Ruabon coalfield. In Oswestry, Llanyblodwel, and Llanymnech there were copper mines and extensive lime quarries. To the north of Shrewsbury, large free-stone quarries were operating in Clive



Table 7.3

Shropshire parishes in 1801 showing the percentage band of the population employed in agriculture and how these percentage bands were related to rural, town and industrial parishes.

Percentage of 1801 Agric. Population	No. & % of Parishes		
	Rural	Towns	Industrial
Under 15%	3 [ 2%]	12 [71%]	13 [19%]
15% to 29%	44 [35%]	3 [18%]	20 [29%]
30% to 59%	44 [35%]	2 [12%]	26 [38%]
Over 60%	36 [28%]	0	10 [14%]
Total	127	17	69

Table 7.4

Analysis of type of industry found in town and industrial parishes analysed against the percentage of the population employed in agriculture in 1801.








Range of % Population	Parish Type	No. of Parishes		
		Extractive & Manufac.	Extractive only	Manufacture only
Under 15%	Town	6 [21%]	0	6 [16%]
	Indus.	7 [24%]	5 [25%]	1 [ 3%]
15% - 29%	Town	1 [ 3%]	0	2 [ 5%]
	Indus.	5 [17%]	8 [40%]	7 [19%]
30% - 59%	Town	1 [ 3%]	0	1 [ 3%]
	Indus.	7 [24%]	5 [25%]	14 [38%]
Over 60%	Town	0	0	0
	Indus.	2 [ 7%]	2 [10%]	6 [16%]
Total Town		8	0	9
Total Industrial		21	20	28
Total		29	20	37



Figure 7.2

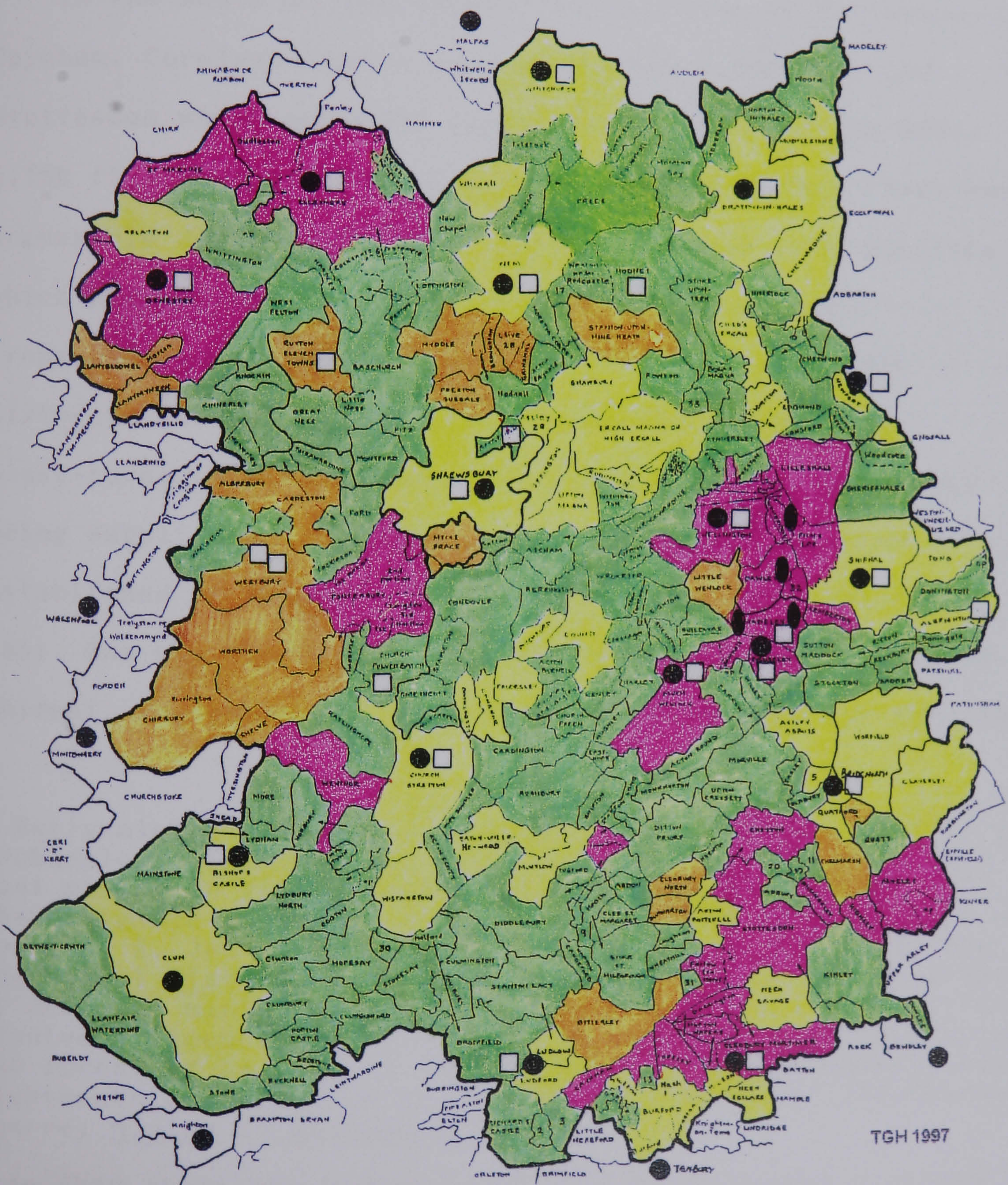
# SHROPSHIRE PARISHES

Industrial and Agricultural areas in the 19th century

- Extractive Industry only  Manufacturing industry only   
 Extractive & Manufacturing Industry  Agricultural only   
 Markets  Fairs  New Markets 

Based upon a map of Shropshire's Ancient Parishes  
 by R. Morgan, Shropshire Records Office (1983).

Markets and Fairs from Thompson's Memorandum Book (1835)





and Grinshill, and whilst these were the primary industry in these parishes some mining operations were also begun for coal and non-ferrous metals, but with limited success. Coal was also mined to the south-west of Shrewsbury mainly in the parishes of Pontesbury and Hanwood. This coal was used primarily to smelt lead from the extensive lead-mines in Westbury, Worthen, Wentnor, Chirbury and Shelve.

In the south of the county the parishes of Bitterley, Caynham, Coreley, Hopton Wafers, Cleobury Mortimer and Stottesdon which surround Titterstone Clee Hill (SO 5977: 1,750 ft.) were industrialized. In these parishes there were accessible deposits of coal, ironstone, clay and limestone which had attracted interest since the Middle Ages.<sup>7</sup> Ironstone and limestone had been mined here since the sixteenth century, and in the eighteenth century the blast-furnaces of Bouldon, Bringewood and Charlecott were being supplied.<sup>8</sup> At least two further blast-furnaces were established on Titterstone Clee Hill, the last closing in 1851. One was owned by Thomas Botfield, a coal-master from Shifnal, who converted the local coal into coke for smelting.

<sup>7</sup> Early mining operations by means of bell-pits and adits is a archaeological feature of the area. The earliest reference to coal mining on Titterstone Clee Hill appears to be in 1235 when 'Wigmore Abbey received five shillings from the sale of coal' A. E. Jenkins, Titterstone Clee Hills: Everyday life, Industrial History and Dialect (1983), p. 9. Further evidence of medieval mining is found in 1260-3 when Walter de Clifford granted a licence to Sir John de Halston to 'dig coles within the forest of La Clie to sell or give away'. Throughout the eighteenth century much of the coal was used for lime-burning. Pearce, Mining in Shropshire, p. 64.

<sup>8</sup> In 1717 these three furnaces had a joint reported output of 1,250 tons of iron compared to 1,300 tons produced from the furnaces of the Ironbridge area in the same period (Table 4.1, p. 180 above).



Because of the difficult terrain in the Clee Hills, this area was served by pack-horses long after other parts of Shropshire were being served by waggons. In 1869 H. C. Bull commented about the supplies of iron-stone made to Bringewood Furnace that:

'It is still within the memory of man that bands of mules, or pack-horses, in single file, carried iron ore down the steep slopes to Bringewood Chase, in the direct route from the Clee hills to the forge by the river; or that the jingle of their tinkling bells was pleasantly heard in the distance as when laden with charcoal from the remote parts of the forest they made their way through the trees.'<sup>9</sup>

Quoting from Plymley's notes, Rowley observed that in the Clee Hill area in 1792, 'some cottagers keep horses to carry lime and coal... some are colliers and lime men who earn 2s and 3s a day and maintain their families in decency'<sup>10</sup> In addition to the use of pack-horses, both Rowley and Jenkins quoting from earlier works commented upon human transport of coal from the remote pits. Jenkins said: 'Pack horses definitely helped with transportation but more frequently the backs of cottagers wives were used' and that these women walked down tracks to the roads where carts were loaded to take coal to surrounding settlements.<sup>11</sup>

The memory of such pack-horse trains also lingered on in children's games. In 1883, when Burne published her book, Shropshire Folk Lore she included a children's play-ground activity from Stanton Lacy called, 'Bellhorses'. She wrote that the players formed long trains, marching and singing:

<sup>9</sup> H. C. Bull, 'Some account of Bringewood forge and furnace', Trans. of the Woolhope Naturalists Field Club (1869), pp. 54-9.

<sup>10</sup> T Rowley, The Shropshire Landscape (1972), p. 213.

<sup>11</sup> Jenkins, Titterstone Clee Hill, p. 10.



'Bell-horses, bell-horses, what time of day?'  
'One o'clock, two o'clock, three and away!'  
'Bell-horses, bell-horses, what time of day?'  
'Two o'clock, three o'clock, four and away!'  
(finally) 'Five o'clock, six o'clock, now time to stay!'

At the end of the song the children stood still, suggesting perhaps that pack-horses normally worked a six-hour day.<sup>12</sup>

Pearce stated, that coal-mining expanded in the first four decades of the century, and that by the 1840's there were about 250 miners producing an average of 25,000 tons of coal per year.<sup>13</sup> However the lack of good roads or waterway transport systems meant that coal mining in the Clee Hills became non-competitive.

Apart from the mining and quarrying of coal, lime and ironstone, this area became a very important centre for the supply of a hard wearing basalt rock called dhu-stone.<sup>14</sup> Jenkins stated that this was made possible by the advent of the railway. In the 1850's the Great Western Railway employed an engineer, Mr. Clarke, to connect the rural village of Bitterley to the main Shrewsbury - Hereford line near Ludlow, and to build an inclined plane to exploit the coalfield on Titterstone Clee Hill. Clarke discovered however, that the basaltic 'dhu-stone', although extremely hard, could be split into cubes and used for building. These cubes which were

<sup>12</sup> C. S. Burne (ed.) Shropshire Folk-Lore; A sheaf of Gleanings, Part II, from the collection of Georgina F. Jackson (1883 re-published 1974), p. 520.

<sup>13</sup> Pearce, Mining in Shropshire (1995), p. 65.

<sup>14</sup> Dhu-stone is the local name for a carboniferous dolerite sill which has intruded into the coal measures in this area. P. Toghiani, Geology in Shropshire (1990), p. 133.



called 'setts' were ideal for building walls and paving streets.<sup>15</sup>

Jenkins suggested that as coal-mining declined, the economy of the area was restored by large-scale stone quarrying which he dates from the 1860's. He stated that in 1855, Mr. Clarke had been involved in tendering for stone to build Cardiff docks, and it was this contract that was the primary cause for the opening of the Dhu-stone Quarry. He commented that the Dhu-Stone Quarry required far more labour than could be supplied locally, which resulted in the migration of workers from all parts of the United Kingdom. He wrote: 'Men were imported from Wales, Scotland, Ireland and many parts of England and by 1860 between 1,500 and 2,000 men were working in the quarrying industry' He thus gives the impression that the influx of migrant workers started from this period.<sup>16</sup>

The population statistics of the four parishes that cover the mining area on Titterstone Clee Hill indicated that a population peak was reached in 1831, apparently due to the importance of coal mining, which was followed by a decline for the next three decades. A small rise of 3.3% occurred between 1861 and 1871 and a larger rise of 15.9% between 1871 and 1881, (see Figure 7.3). It appeared therefore that the effect of the dhu-stone industry on the migration to the area was, in fact, later than the period anticipated by Jenkins, and beyond the period covered by this thesis. Further, from Figure 7.3 it can be seen that the rise in population affected

<sup>15</sup> Jenkins, Titterstone Clee Hill, pp. 28-31.

<sup>16</sup> Jenkins, Titterstone Clee Hill, pp. 28-29.



Figure 7.3

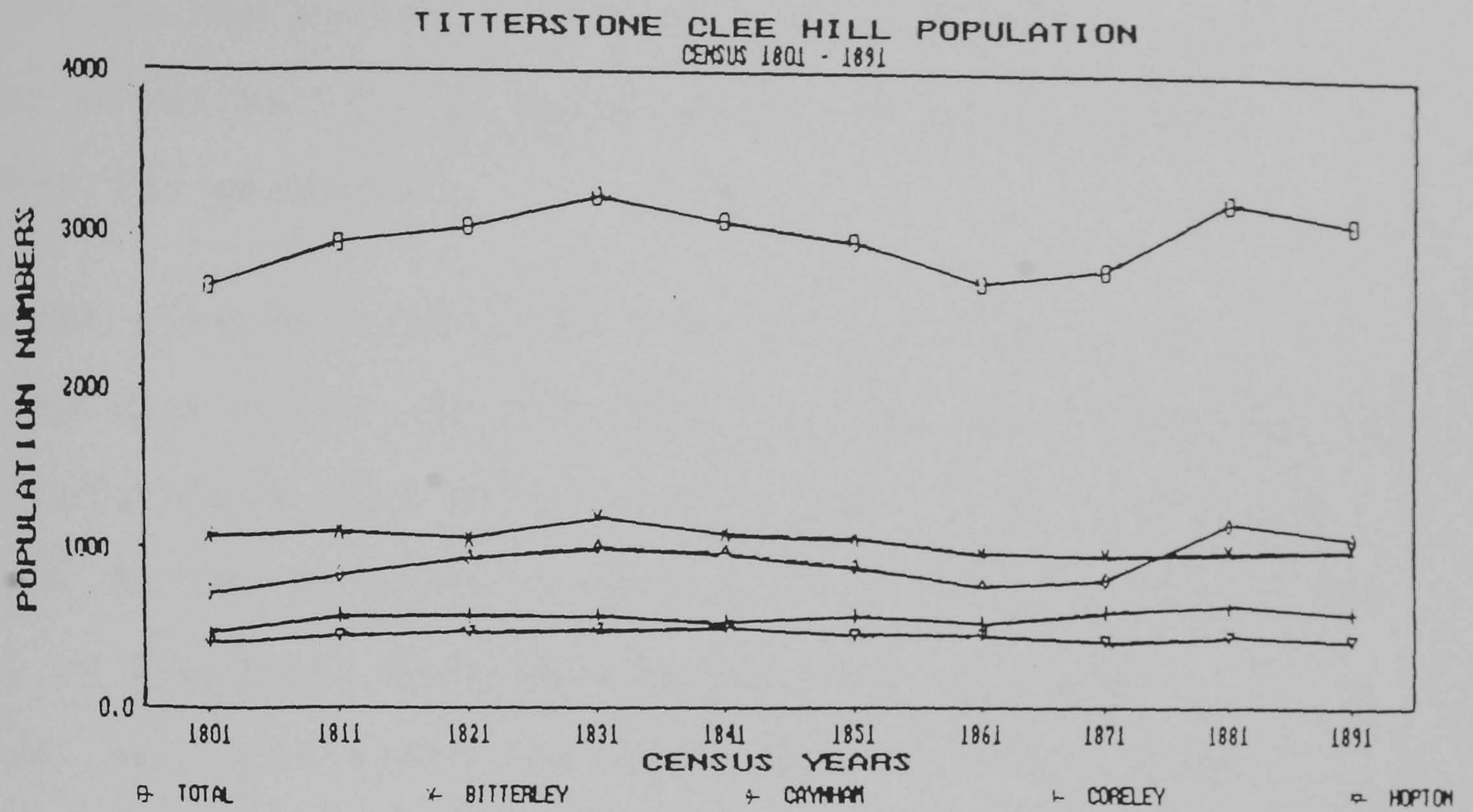
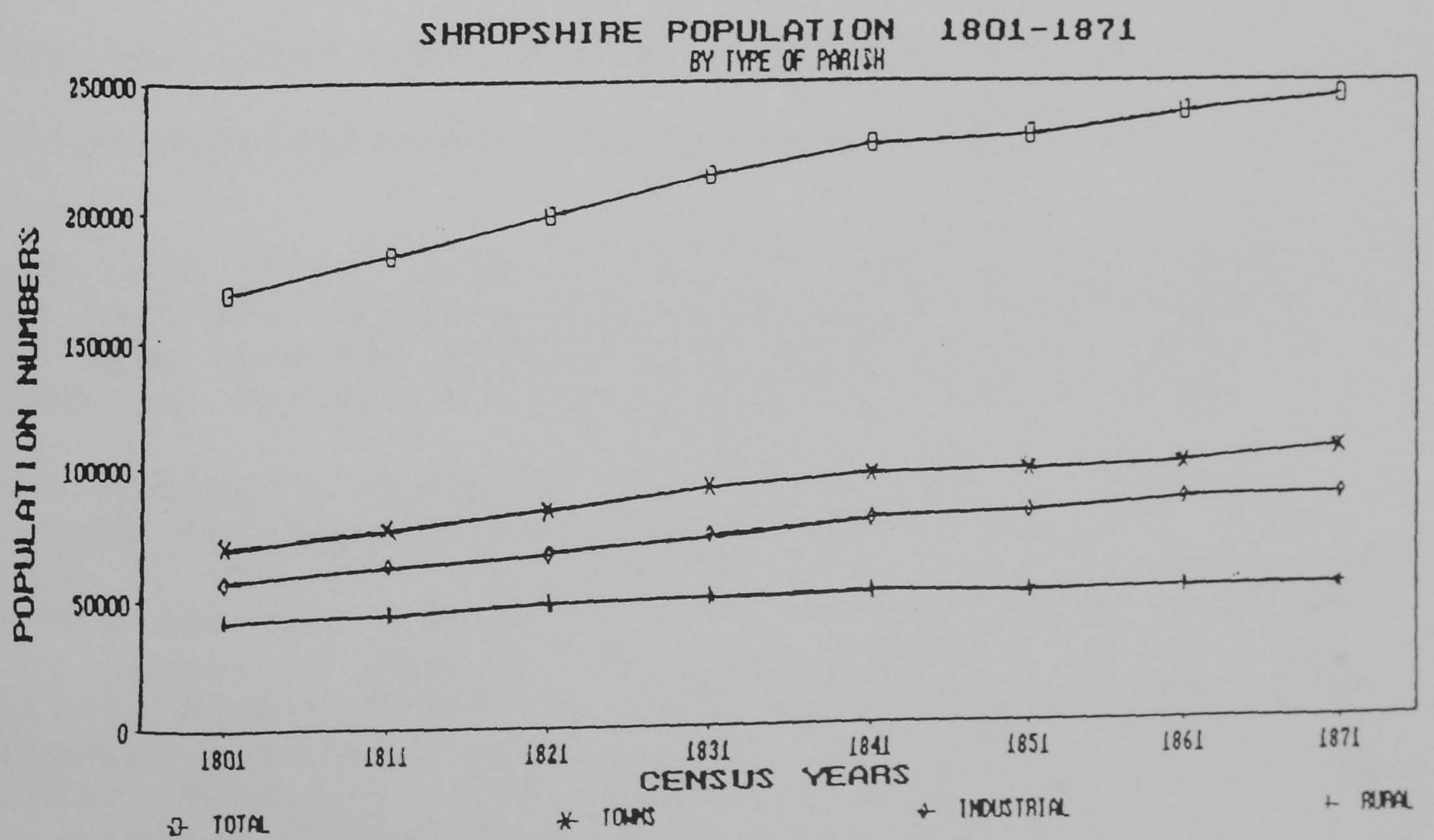


Figure 7.4





only two of the four parishes, Coreley to a small extent, and Caynham to a large extent. By 1871 the quarrying area of Caynham had become a separate parish called Knowbury. The population of the parish of Hopton Wafers which included a number of mines as well as paper mills, scarcely varied throughout the period.<sup>17</sup>

On Brown Clee Hill (SO 5986 1700 ft.) similar rock formations were mined and quarried for coal and limestone, but unlike Titterstone Clee Hill the Dhu-stone industry was not developed. By the nineteenth century the coal deposits in the parishes of Cleobury North and Burwarton were almost exhausted, and after 1850 the mines were leased from the estates of Thomas Childs and Edward Duce by John Blunt. A tramway was built later to link the Brown Clee workings with the main railway system.<sup>18</sup>

#### The location of the manufacturing industries.

As Table 7.4 showed, manufacturing industries existed in seventeen town parishes and forty-nine industrial parishes. This table indicates that, whilst towns with the least agricultural population show the highest figures for

<sup>17</sup> A brief look at the area in the 1871 census enumerator books (RG 10/2726) confirms the migration of stone workers of whom most came from the Mount Sorrel and Markfield areas of Leicestershire. Further investigation would be of value.

<sup>18</sup> Pearce, Mining in Shropshire (1995) p. 65; M. Moulder, A Shell Guide to Shropshire (1951, 1973 edn.), p. 73. From exploration of the area around Brown Clee Hill the remains of an incline plane and tramway were discovered. By discussions with local people it appears that had been constructed from the summit to Ditton Priors by about 1908. From Ditton Priors a narrow-gauge railway formed a link to the main railway line near Cleobury Mortimer. This field study also revealed to the west a considerable lime-processing plant was built at Cockshutford (SO 5885) which was apparently still in operation in the late 1940's.



manufacturing, there were twenty-one parishes in the 30- 59% range of population which contained some manufacturing industries.

One of the industries which tended to be located in rural areas was paper-making. There were nineteen water-powered paper-mills known to have operated in Shropshire in the early nineteenth century. To these can be added a further eight, which at some times had operated as paper-mills and at other times as corn-mills or walk/fulling-mills. Paper-making was a specialized activity which used water-powered stamping machinery, and required a small, but skilled, work-force.

In the first decade of the nineteenth century paper-making machines were introduced into Britain, but none of the forty machines erected between the years 1807-22 were built in Shropshire.<sup>19</sup> Up until the 1860's paper was largely made from imported and home-produced rags and by the mid-nineteenth century paper-making in Shropshire was an industry in decline. However one paper-mill at Tibberton (SJ 6920) continued until 1912.

The analysis of Bagshaw's Shropshire Directory (1851) showed that twenty-nine millers were located in town parishes, and 192 millers in rural parishes, most of which appear to have operated water-mills, although by 1851 some steam-driven mills were being introduced. In his analysis of the River Worfe, its mills and industrial sites, Robinson identified 48 water-mill sites powered by the River Worfe and its tributaries. Some of these had a varied career being used as

<sup>19</sup> 'List of Fourdrinier Machines erected 1807-22'. source: Fourdrinier Committee (1837), listed in D. C. Coleman, The British Paper Industry, 1495-1860 (1958). p. 197.



forges in one period, and fulling or corn-mills in another.<sup>20</sup>

In a study of mills on the rivers Team, Clun, Onny and Corve, Tucker has identified 65 sites in south-west Shropshire with a further five in Radnorshire and twelve in Herefordshire.<sup>21</sup> At some of these sites more than one building has been identified. Most of the mills listed were corn-mills, but he too recognized some sites that had been used for different functions at different periods. For example at Bouldon on the Pye Brook (a tributary of the River Corve) a blast-furnace had operated from at least 1644 to 1790. In Bouldon there was also a paper-mill between 1803 and 1832, but following that period it was used as a corn-mill. Some authors suggested that all three activities used the same site but others suggested that there may have been more than one mill site in Bouldon. Further study and archaeological research may demonstrate this in the future.<sup>22</sup>

### The overall population change in Shropshire, 1801-1871

As Figure 7.4 shows, the population rose steadily between 1801 and 1871 to almost 250,000. This was a rise of 44% which was mainly due to population increase in the towns and industrialized parishes, although it needs to be appreciated

<sup>20</sup> D. H. Robinson, The Wandering Worfe (1980).

<sup>21</sup> Tucker has also considered another 28 possible mill-sites on these rivers and their tributaries. G. Tucker, Some Watermills of South-west Shropshire (1991).

<sup>22</sup> Tucker, Some Watermills; L. C. Lloyd, 'Paper-making in Shropshire' in T.S.A.S. Vol. 49 (1937-8), pp. 121-187; L. C. Lloyd, 'Paper-making in Shropshire, supplementary notes', T.S.A.S. vol. 53 (1950), pp. 153-163; Rowley, Shropshire Landscape, p. 92 and pp. 219-20; T. Rowley, 'Bouldon Mill: 700 years of rural industry' The Shropshire Magazine (1996), pp. 28-29.



that the population of industrialized parishes could be affected by the growth or decline of a particular industry.

By relating acreage to population in town, rural, and industrialized parishes, it was possible to measure change in the density of population. As Figure 7.5 indicates the population density of the rural parishes remained fairly constant throughout the period. The industrial parishes show a gentle rise but the highest rise in density was experienced in the town parishes. This suggested that towns may have been growing from migration as well as natural increase.

An analysis of the inter-censal growth-rate (Figure 7.6) showed that for industrial parishes the highest growth-rate (10.4%) was achieved between 1801 and 1811, but between 1811 and 1821 it slowed dramatically to third place. From 1821 to 1861 the growth-rate of the industrial parishes was higher than that of towns or rural areas. In the last decade (1861-71) population growth in the industrial parishes fell to 1.1%.

In towns, the highest growth rate (10%) was achieved in the period 1811-21, and it remained high in 1821-31, however, it was low for the next three decades rising again in the last decade.

Throughout the period from 1801 to 1871, the rural population growth rate fluctuated. The highest rate of 7.6% being achieved in the 1811-21 decade, when it exceeded that of the industrial parishes. However, for the last three decades it was very low and even fell to a negative figure in 1841-51.



Figure 7.5

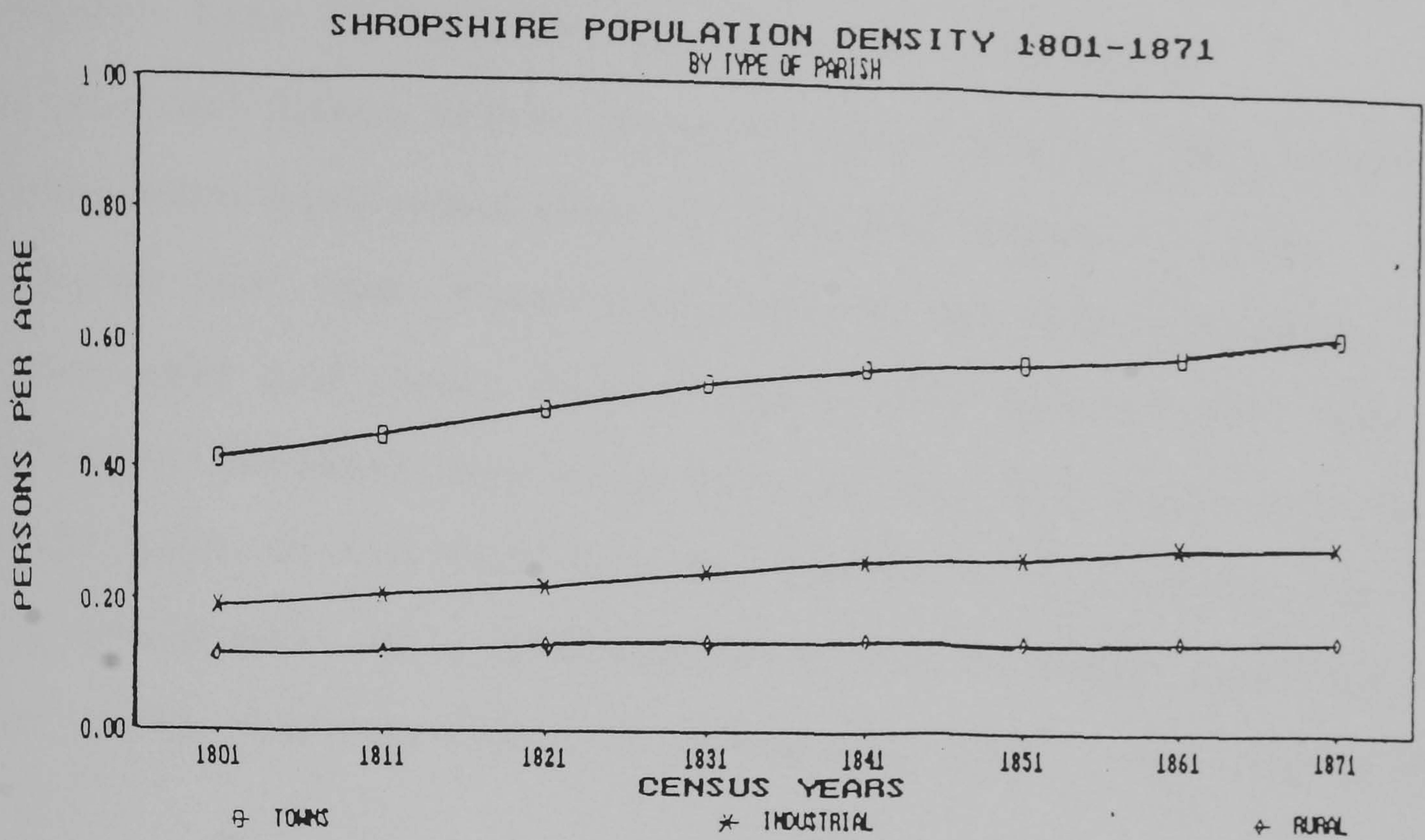
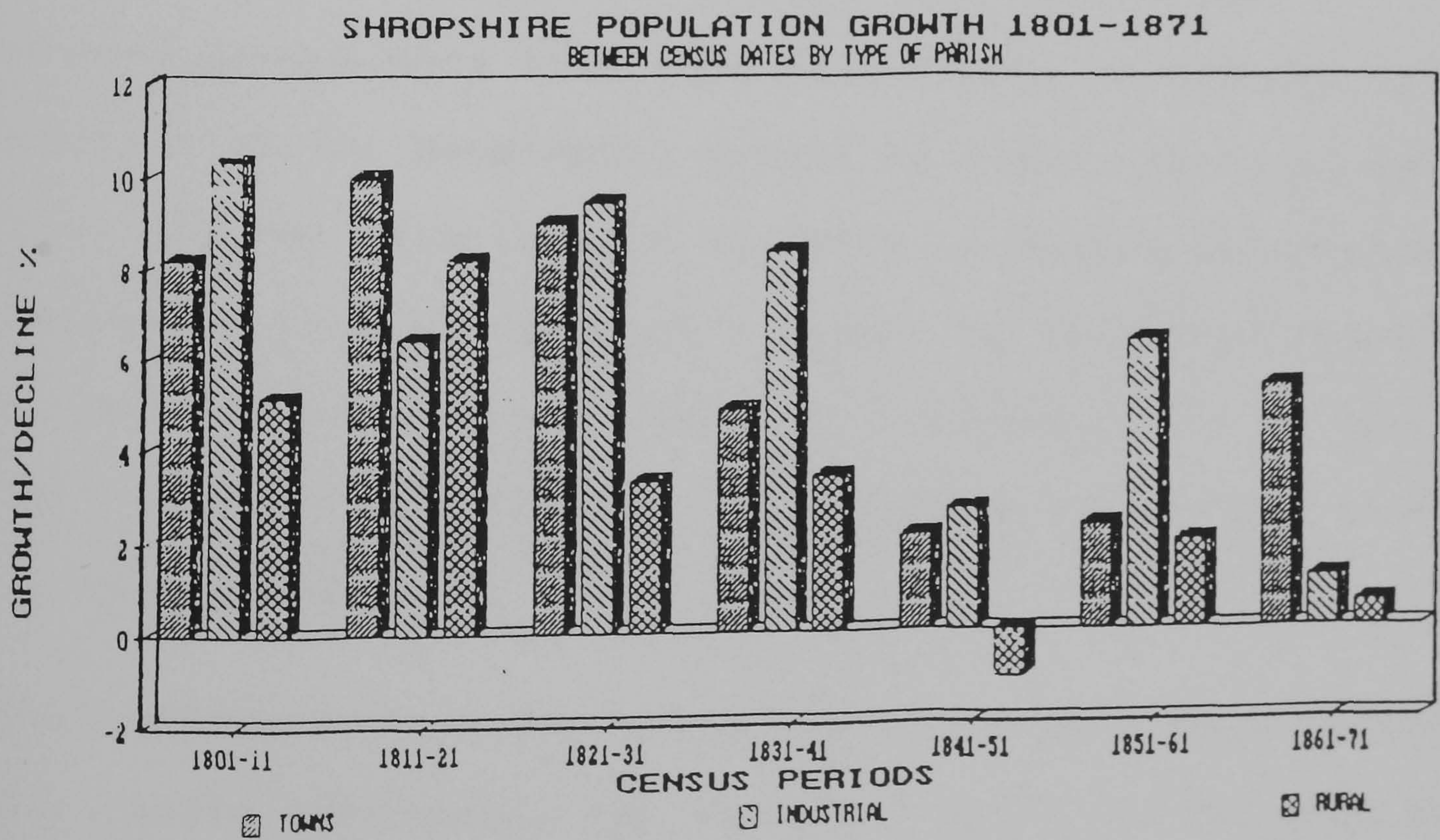


Figure 7.6





This analysis demonstrated that population figures can fluctuate, and if population growth is linked to changing economies then it is probable that the industrial parishes and towns which experienced growth in the earlier decades were also expanding in economic terms. It also suggested that some towns may have fallen into recession between 1831 and 1861, recovering in the last decade. The industrial parishes may also have fallen into recession in 1841-51, and in the last decade. Further, it suggests that there could well be a difference in the economic function of towns which served either an industrial or a rural hinterland.

#### Shropshire town hinterlands.

In the 1930's, Walter Christaller propounded his deductive central place theory to explain 'the number, size and distribution of service settlements according to the "principles of ordering" '.<sup>23</sup> Since that date, some historical geographers have used this theory as a model in the exploration of the geographic spread of towns, their changing function and the relationship of towns to their hinterlands. Christaller's theory suggested a number of differing functions which can be used to place towns in an hierarchical structure, but this does not necessarily aid a scholar in the delineation of a town's hinterland.

Some scholars have defined particular town hinterlands by using a single surrogate, for example Everitt in his work on

<sup>23</sup> W. T. R. Pryce, 'Town and Country Relationships', Aspects of Historical Geography Open University Course, Historical Sources and the Social Scientist, (1982). p. 20; with reference to W. Christaller, Central Places in southern Germany (1933), translated by C. W. Bask (1966).



Maidstone showed how the range of local-carrier services could be used to delineate a hinterland of supply.<sup>24</sup>

To test this method of hinterland delineation for the Shropshire Area in the 1870's, the recorded 'local' carrier routes from all towns were calculated and mapped (Figure 7.7). There were 34 towns which had no local carriers listed, but nine towns showed that they were visited by a local carrier more than three times a week. Figure 7.7 demonstrates how large towns like Chester, Worcester, Hereford and Shrewsbury dominated a considerable hinterland in terms of local transport provision. It shows that 'local' carriers from Oswestry and Ludlow also served an extensive hinterlands in and around Shropshire, and that Much Wenlock served the valley system known as Corvedale, as did a route from Ludlow. The route shown from Clun linked it to its nearest railway station at Craven Arms. However in the 1870's, there were no similar routes for any other Shropshire towns and therefore this single method of hinterland delineation can be unreliable.

To assess the possible link between 'local' carrier services and the marketing function of towns, the days on which they travelled was also investigated (Appendix 5). It appeared that journeys by 'local' carriers coincided with the market function of towns, as 94% of the journeys listed were on a market day. Some centres held more than one market day. In Birmingham there were 3, the 'local' carriers timed their

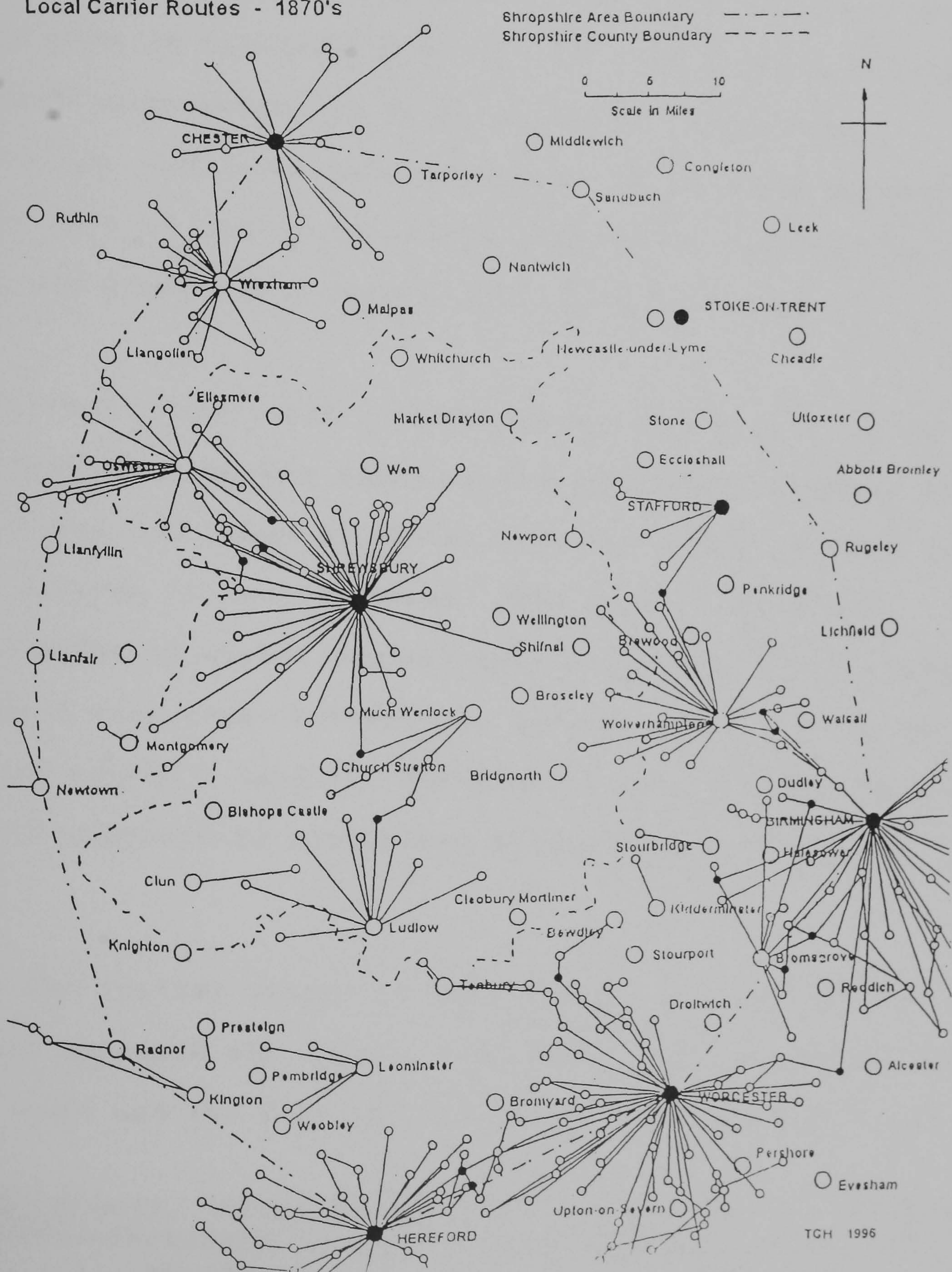
<sup>24</sup> A. Everitt, 'Country carriers in the nineteenth century', Journal of Transport History, new Series, vol. 3 (1976), pp. 179-202.



Figure 7.7

## THE SHROPSHIRE AREA

Local Carrier Routes - 1870's





journeys so that 61% coincided with the main market day, 20% on the second, and 14% on the third. Only 4 journeys (5%) were made into Birmingham which did not coincide with a market day.

Other scholars appear to have realized the limitations of using 'local' carrier routes to delineate a hinterland and have used multi-surrogates. For example, O'Dell used a number of different perspectives in his work on market-town hinterlands in Leicestershire in 1957. These included: the administration areas, an index of service provision, population, and local carrier routes. Using these perspectives he was able to associate groups of parishes with particular towns and study their relationship as hinterlands.<sup>25</sup>

Previous experience in undertaking an analysis of the distribution of market towns on the Shropshire-Cheshire Plain (see Figure 1.6, page 21 above) produced a mean mileage of 8.5 miles between all market towns. This gave a reasonable distribution of market hinterlands, with very little overlap, but there were areas between the circles which were in an apparent no-man's land.<sup>26</sup> Therefore it was realized that an improved approach to hinterland delineation needed to be taken.

In the initial stages of the analysis for this thesis a modified approach was taken. The mean distance between each market town and its four nearest neighbours was calculated.

<sup>25</sup> P. R. O'Dell, 'Urban spheres of influence in Leicestershire in the mid-nineteenth century', Geographical Studies, vol. 2, pt. 4 (1957), pp. 30-45.

<sup>26</sup> This was a study of the 'Changes in population and status of market towns on the Shropshire-Cheshire Plain, 1800-1840'.



To this was added another aspect, which had proved significant in another research project which explored the hinterland of the town of Shifnal: the location of gentry seats as listed in a trade directory.<sup>27</sup> Using this method can create a reasonable picture of assumed town hinterlands, but as Figure 7.8 shows there were still areas which were not included. Landscape features may be seen as a reason, for example the area between Ludlow and Bridgnorth is occupied by the extensive Clee hills but they still contained a population which required the services provided by a town.

By consideration of various surrogates, in addition to 'local' carrier routes, it was possible to discover with a reasonable degree of certainty which Shropshire parishes related to a particular market town, or market centre.<sup>28</sup>

The term market centre is applied to locations which developed a market on particular days but were not listed as market towns in the directories. Further, this study of market hinterlands was coupled to a study of the trading functions of all parishes in 1851 and 1871, using the databases of Bagshaw's Shropshire Directory and Cassey's Shropshire Directory (see page 310 above).

<sup>27</sup> T. G. Hill, 'The trading community of Shifnal and its geographical and genealogical linkages, a case study 1841-1861', (unpub. M.A. Dissertation, Dept. of English Local History, Leicester University, 1988-9). Acknowledgement is also given to the members of the Church Stretton Local History Class (1991) who undertook some of the initial plotting of gentry seats around Shropshire towns.

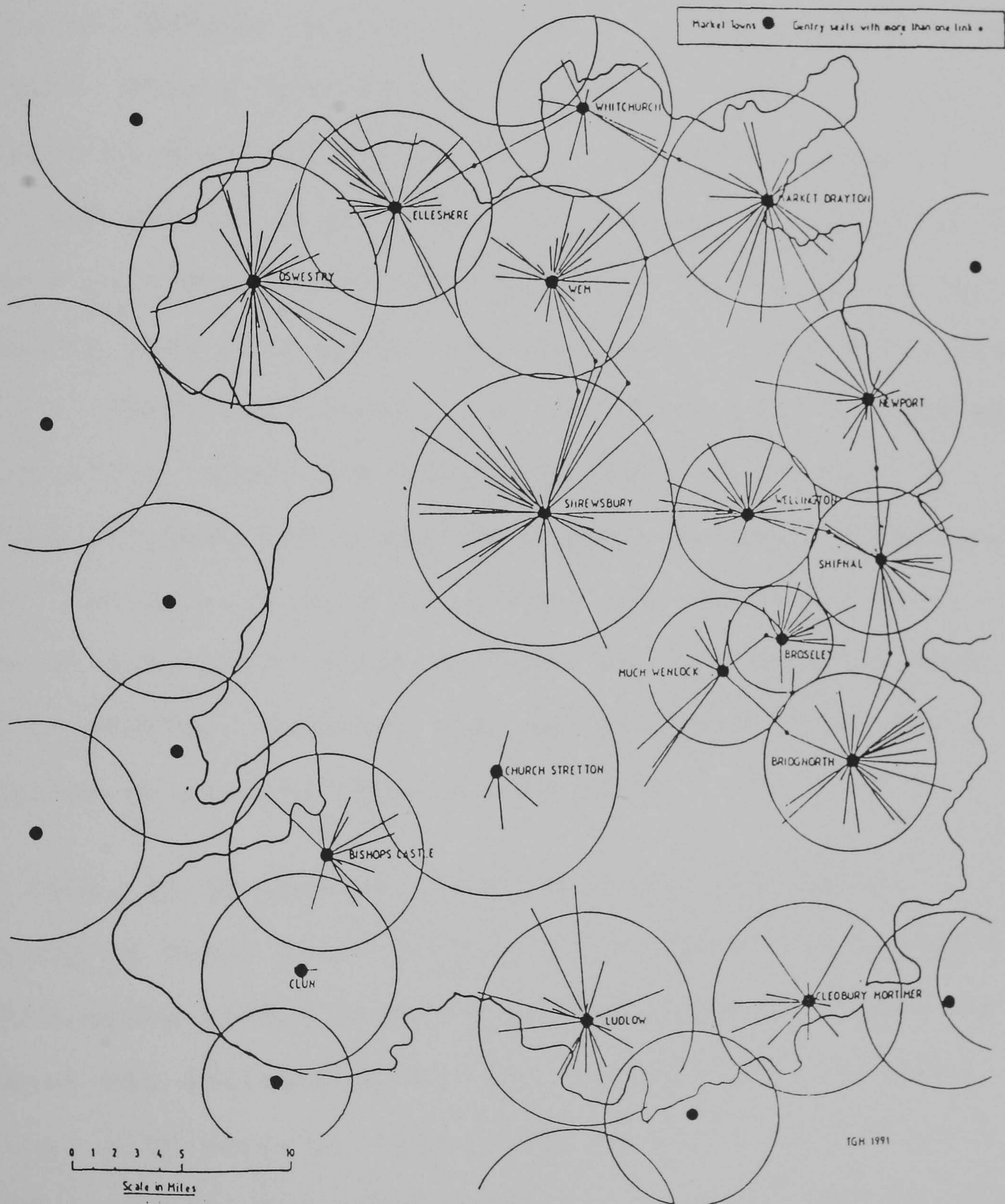
<sup>28</sup> Other surrogates used were: the areas covered by Quarter Session Courts, the Post Office Letter routes, Money Order Offices, and Poor Law Unions. A further discussion on this topic will be found on pages 344 - 347 with a map showing which parishes we assigned to which town as Figure 7.13. page 347 below.



Figure 7.8

# ASSUMED SHROPSHIRE MARKET TOWN HINTERLANDS

Based upon the mean distance between the four nearest towns and showing the direction and location of Gentry and Clergy Seats listed in Trade Directories for each town 1835 & 1850.





The analysis of these two databases was achieved by calculating the functional index of each settlement as a measure of its trading function. This technique was used by Lewis in 1975 in his study of the changing market function of towns in Mid-Wales, and parts of Herefordshire and Shropshire, and also features in other works<sup>29</sup>. In this technique the total number of outlets listed for each type of function (i.e. accountants, bakers, blacksmiths etc.) are counted for each settlement. Then a location coefficient for each function is calculated by dividing one outlet by the total number of outlets and multiplying by 100. The location co-efficient is then used as a multiplier for the number of outlets of that function in each settlement which creates a centrality value. Finally a 'Functional Index' (FI) is established by summing the centrality values for each settlement. Care must be exercised in using the resulting figures because 'Functional Indices' can only be used to compare one settlement with another at a specific point in time, and not from one time period to another. However, some analysis over time can be achieved by placing them in rank order.

In 1851, in Shropshire, there were 268 settlements containing in total 8,678 outputs of trade. In 1871 there were 266 settlements with a total of 7,378 outputs of trade. Each settlement was analysed using sixty-one different trading functions, with certain trades being combined to achieve a meaningful result, for example China, Glass and Earthenware

<sup>29</sup> Lewis, 'The analysis of changes'; C. R. Lewis, 'The calculation of Urban Functional Indices' in M. Drake and R. Finnegan (eds.), Sources and Methods: a Handbook (1994); H. Carter and C. R. Lewis, An Urban Geography of England and Wales in the Nineteenth Century (1990).



dealers; Braziers, Tin-smiths, Locksmiths and Gas Fitters.<sup>30</sup>

It has already been noted on pages 308 - 309 above that there were changes in the number of market centres in the nineteenth century, and for Tables 7.5 and 7.6 Madeley is included as a market town for 1871, even though a market day was not specified, making a total of twenty-one towns. Table 7.6 indicates that there was a higher functional index achieved by the towns in 1871 than in 1851. Although a town's FI cannot be compared from one period to another, this table does suggest that by 1871 the trading function of the towns was becoming dominant over smaller market centres such as the villages.

Prior to 1851, the Shropshire Trade Directories only give details of market towns. However, the analysis of these two directories gives an insight into the function of all settlements in the county. This allows a researcher to include what Christaller calls, lower status settlements. Table 7.6 demonstrates that the highest functional indices (FI) were achieved by towns, with the town of Shrewsbury supreme having a FI of 983.7 in 1851 and 1071.8 in 1871. Certain towns like Oswestry, Ludlow, Bridgnorth, Whitchurch and Wellington also emerge with a high FI and appear to become dominant in their areas.

<sup>30</sup> Previous experience in using Trade Directories has demonstrated certain pitfalls in assessing numbers of trading functions. In some entries there are different combinations of trades, for example: 'plumbers and painters', or 'plumbers and glaziers'. Further, a single trader, such as an umbrella-maker, in the entire area could create a location coefficient of 100 which when applied to one settlement created a biased result. Therefore the rare and combination trades were grouped, for full details see Appendices 6 and 7.



Table 7.5

Functional Indices - Number of settlements in various functional index ranges in 1851 and 1871, calculated from Bagshaw's Directory of Shropshire (1851) & Cassey's Directory of Shropshire (1871).

Functional Index Range	1851		1871	
	No. of Towns	No. of other Settlements	No. of Towns	No. of other Settlements
1,000 +	0	0	1	0
500 - 999	1	0	1	0
250 - 499	5	0	2	0
125 - 249	5	1	6	0
100 - 124	1	1	2	0
75 - 99	1	0	4	0
50 - 74	1	0	3	2
25 - 49	3	11	2	8
20 - 24	1	5	0	4
15 - 19	1	11	0	11
10 - 14	0	15	0	22
5 - 9	0	31	0	44
Under 5	0	138	0	160
No function	0	55	0	15
Totals	19	268	21	266

Table 7.6

Functional Indices - The changes in town functions and rank order between 1851 and 1871. [sources as above].

Town name in 1851	Functional Index	Rank Order	Town name in 1871	Functional Index	Rank Order
Shrewsbury	939	1	Shrewsbury	1072	1
Bridgnorth	406	2	Oswestry	545	2
Oswestry	369	3	Ludlow	376	3
Ludlow	286	4	Bridgnorth	308	4
Whitchurch	277	5	Wellington	241	5
Wellington	251	6	Drayton	193	6
Wem	173	7	Whitchurch	165	7
Broseley	146	8	Newport	156	8
Drayton	144	10	Broseley	133	9
Newport	138	11	Ellesmere	129	10
Ellesmere	128	12	Ironbridge	106	11
Shifnal	101	14	Madeley	101	12
Madeley	85	15	Cleobury M	94	13
Dawley	52	16	Wem	91	14
Bishops Cas.	48	17	Shifnal	88	15
Cleobury M.	46	18	Bishops Cas.	76	16
Wenlock	45	19	Dawley	72	17
Clun	23	32	Oakengates	67	18
Stretton	19	39	Wenlock	64	19
Ironbridge	no separate record		Stretton	40	25
Oakengates			Clun	34	26



Figures 7.9 (1851) and 7.10 (1871) show that, apart from Ludlow, towns with a high FI were located in north and east Shropshire. This can be attributed, in part, to industrial activity and the presence of advanced transport systems. Within the hinterland of Oswestry, situated in the north-west corner of the county, there were extensive mines and quarries, especially in the area served by the Montgomeryshire Canal. This town continued to expand when it became an important railway centre. Whitchurch, in the north-east of the county, was located on a main road from London to Chester via Birmingham and also on the road from Bristol to Manchester via Shrewsbury. It was also on the Ellesmere Canal, which was part of The Shropshire Union Canal complex, and by 1870 on the main railway line from Shrewsbury to Crewe (see below).

As the importance of Bridgnorth as a river port declined, so new industries such as engineering and carpet manufacture were developed, and by 1871 it was connected to the rail network. Wellington was one of the first Shropshire towns to be on a railway network, and much of its hinterland was in the growing industrial area of the East-Shropshire coalfield. By comparing Figures 7.9 and 7.10 the relative growth of the new market centres, Oakengates, Dawley, Madeley and Ironbridge is illustrated. By 1871 they were all connected into the railway network.

Records for 1801 gave no details from which a functional index could be built, however the population of town's hinterlands in that year could be mapped (Figure 7.11). This suggests that towns in the the north and east of the county were already important centres of trade, serving large



Figure 7.9

# The Distribution and Relative Scale of Shropshire Town Functions 1851

Including villages which had a central-place function.

From Bagshaw's *Directory of Shropshire* (1851)

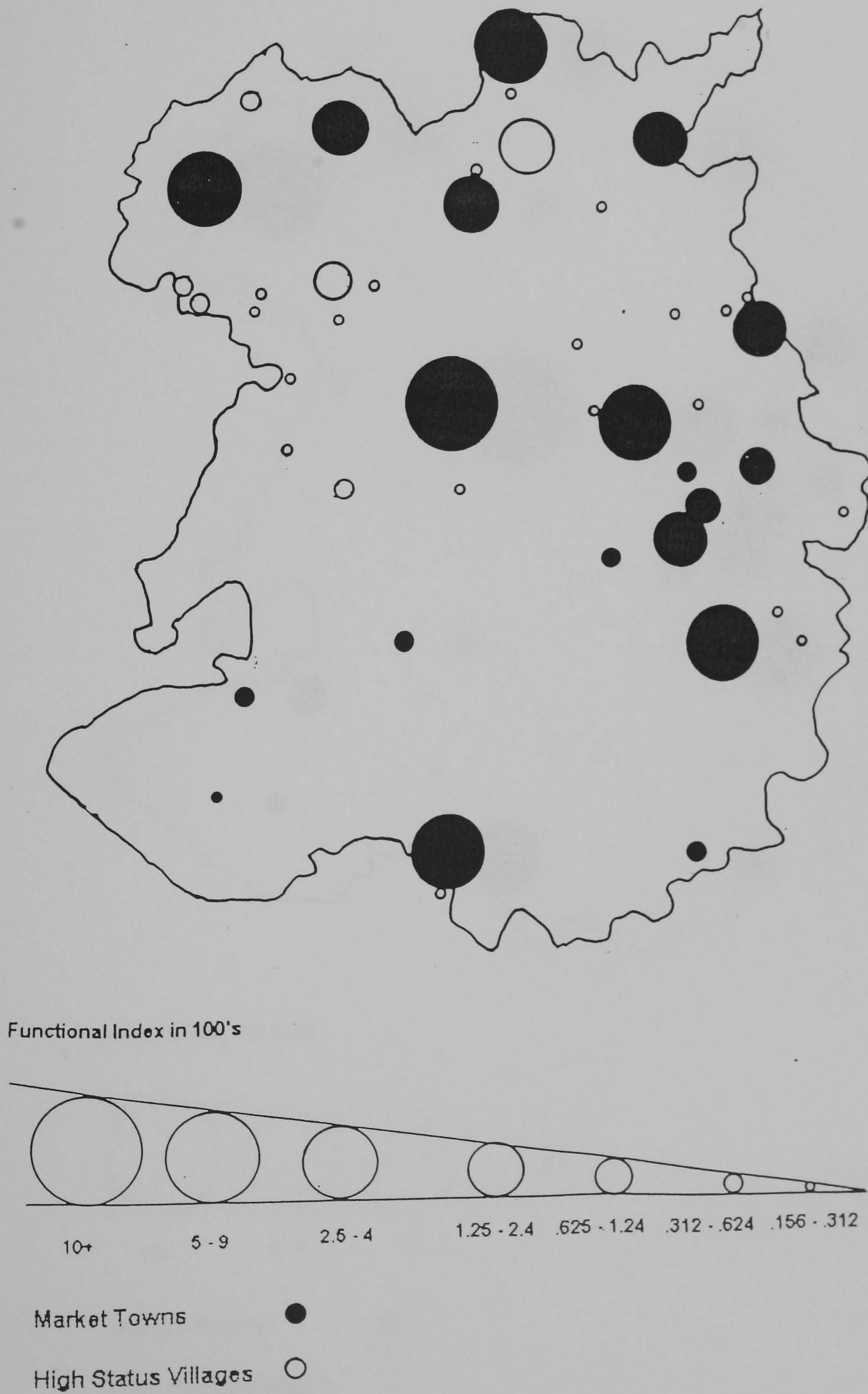


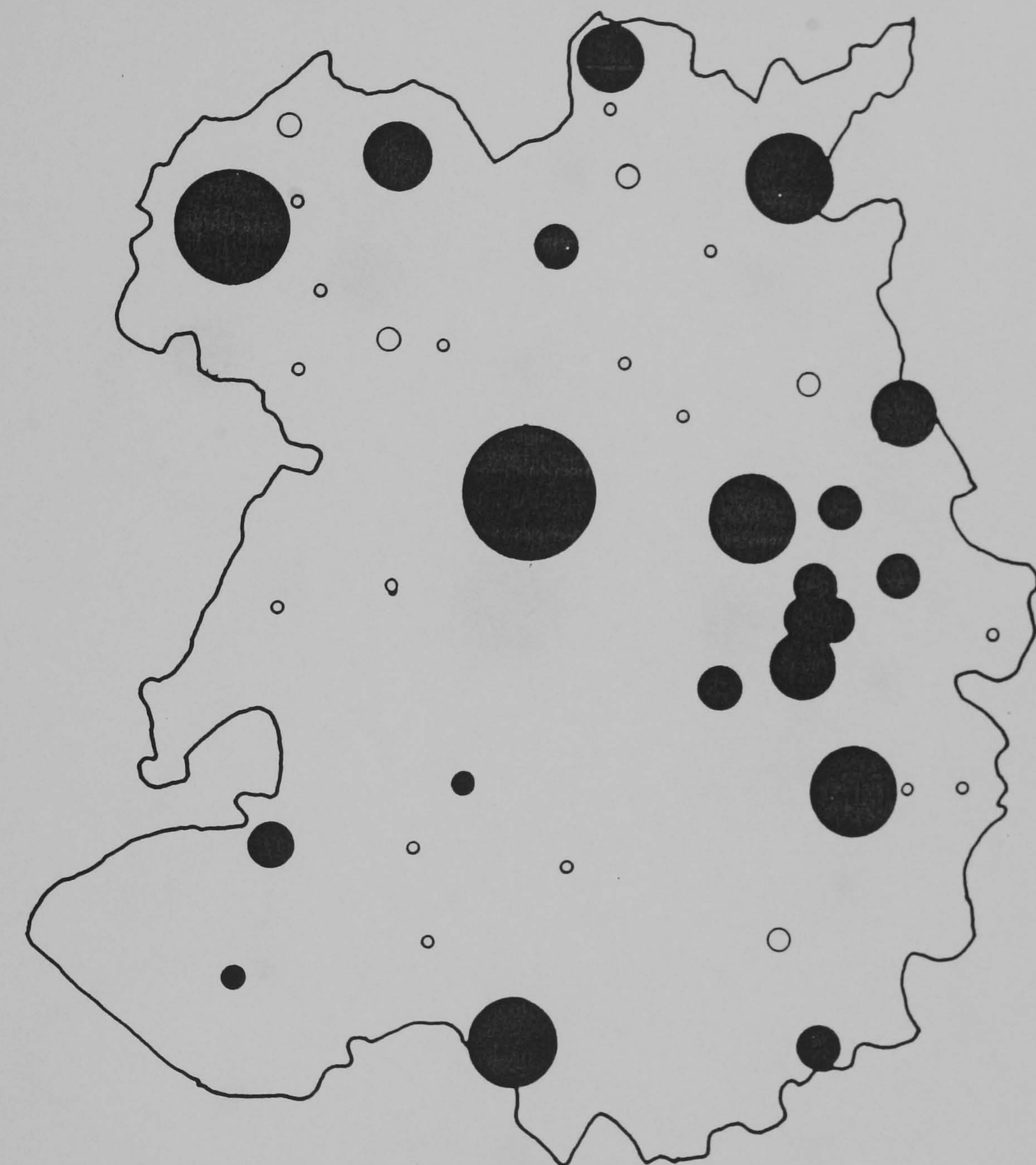


Figure 7.10

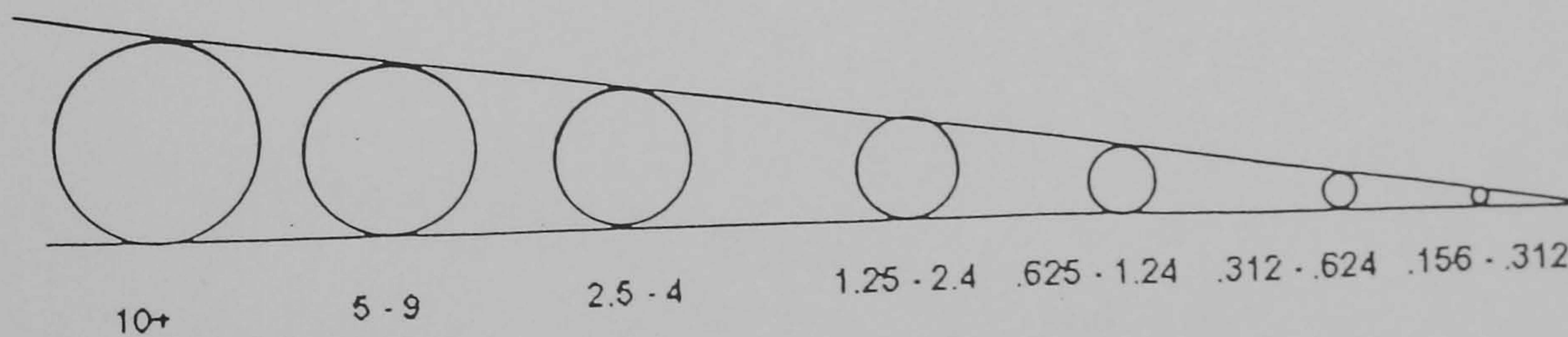
# The Distribution and Relative Scale of Shropshire Town Functions 1871

Including villages which had a central-place function.

From Cassey's *Directory of Shropshire* (1871)



Functional Index in 100's



Market Towns



High Status Villages

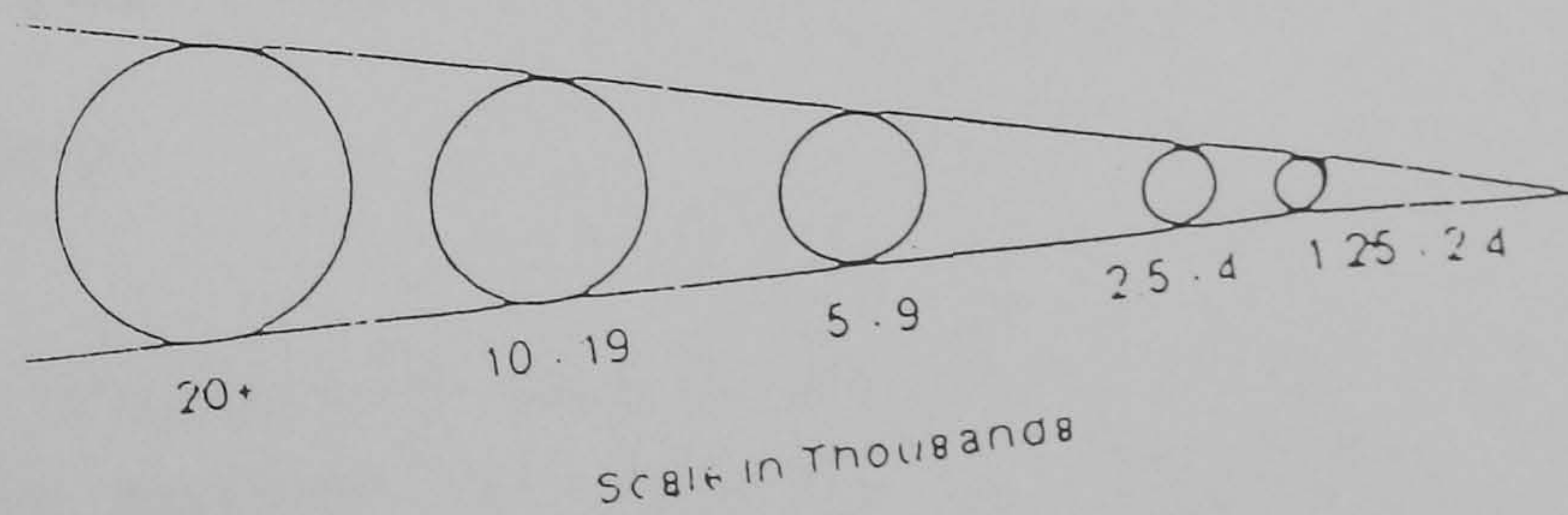
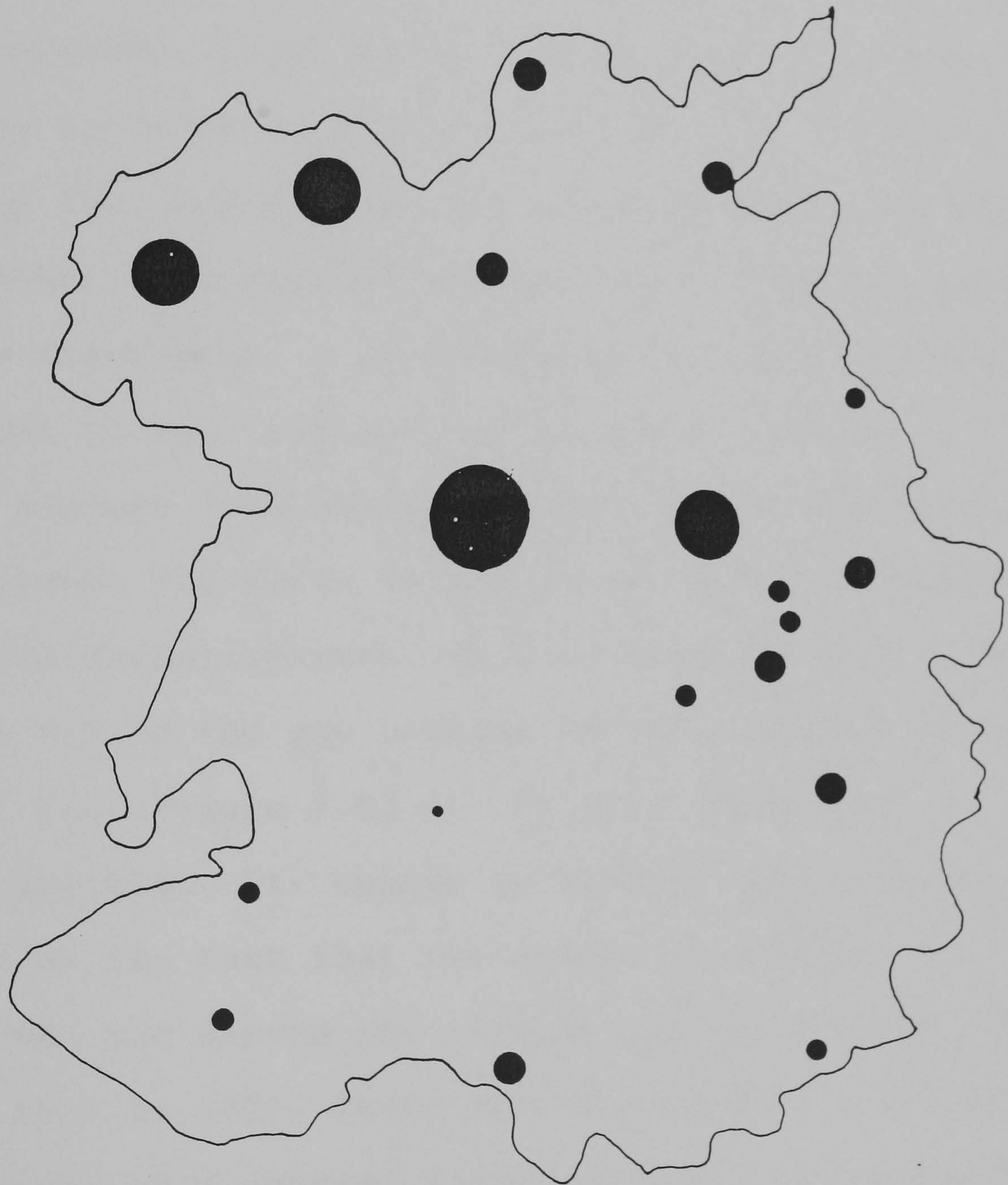




Figure 7.11

**The comparative size of populations of Shropshire towns, including their hinterlands, in 1801.**

(based upon population figures in the Victoria County History vol II)





populations. By 1871, the dominance of this area became even more pronounced especially in the new market centres on the East Shropshire coalfield (Figure 7.12). This suggested that the trading FI's are linked to hinterland populations, and as will be discussed below the transport facilities may also have had an effect upon the growth of a town's economy.

Because the databases used for this analysis included all Shropshire parishes, high-status villages could be identified, and these are included in Figures 7.9 and 7.10. In 1851, Prees was a village that had a FI of 145 which placed it in 9th position, higher than that of eleven towns. This village was described by Bagshaw as 'a considerable village', and he then commented that it was 'intersected by the Ellesmere, Whitchurch, Newport, Shrewsbury and Market Drayton turnpike roads'. In Figure 7.9 Prees is the large circle between Wem, Whitchurch and Market Drayton. This village was thus a supply-centre which filled the gap between the hinterlands of those three towns, (see Figure 7.8).<sup>31</sup> By 1871, Prees was in the 28th position, its change in trading status being demonstrated by the fact that the number of grocers or shopkeepers who had served the village fell from twenty-three in 1851, to four in 1871. There can be no doubt, that the decline of Prees as a central place, was due to the opening of Prees railway station in 1858. This allowed the population of Prees easy access to Whitchurch or Wem, and also to Shrewsbury.

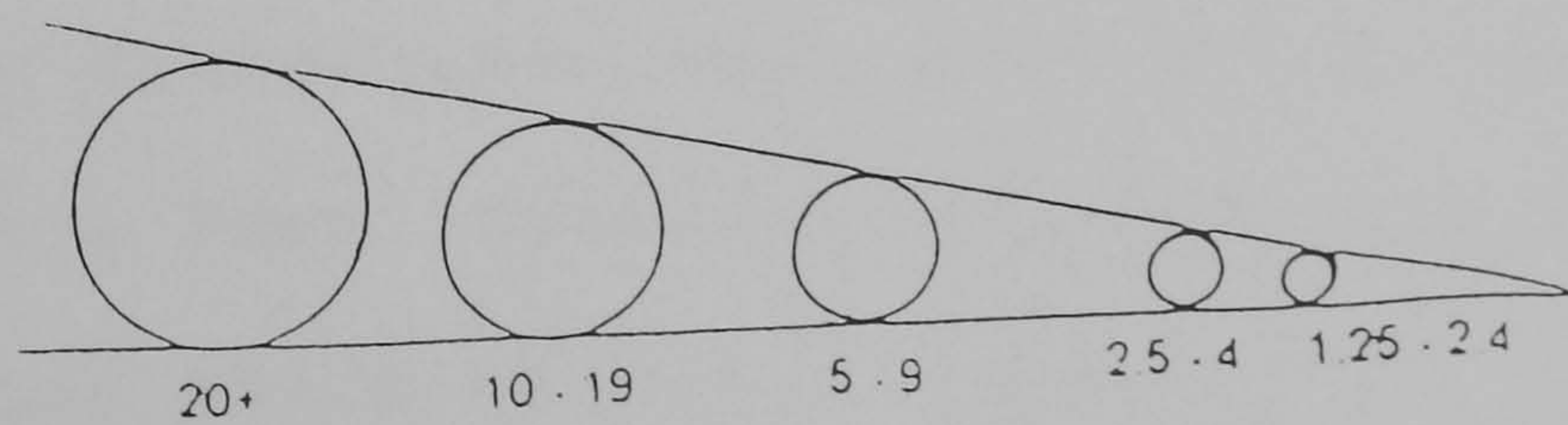
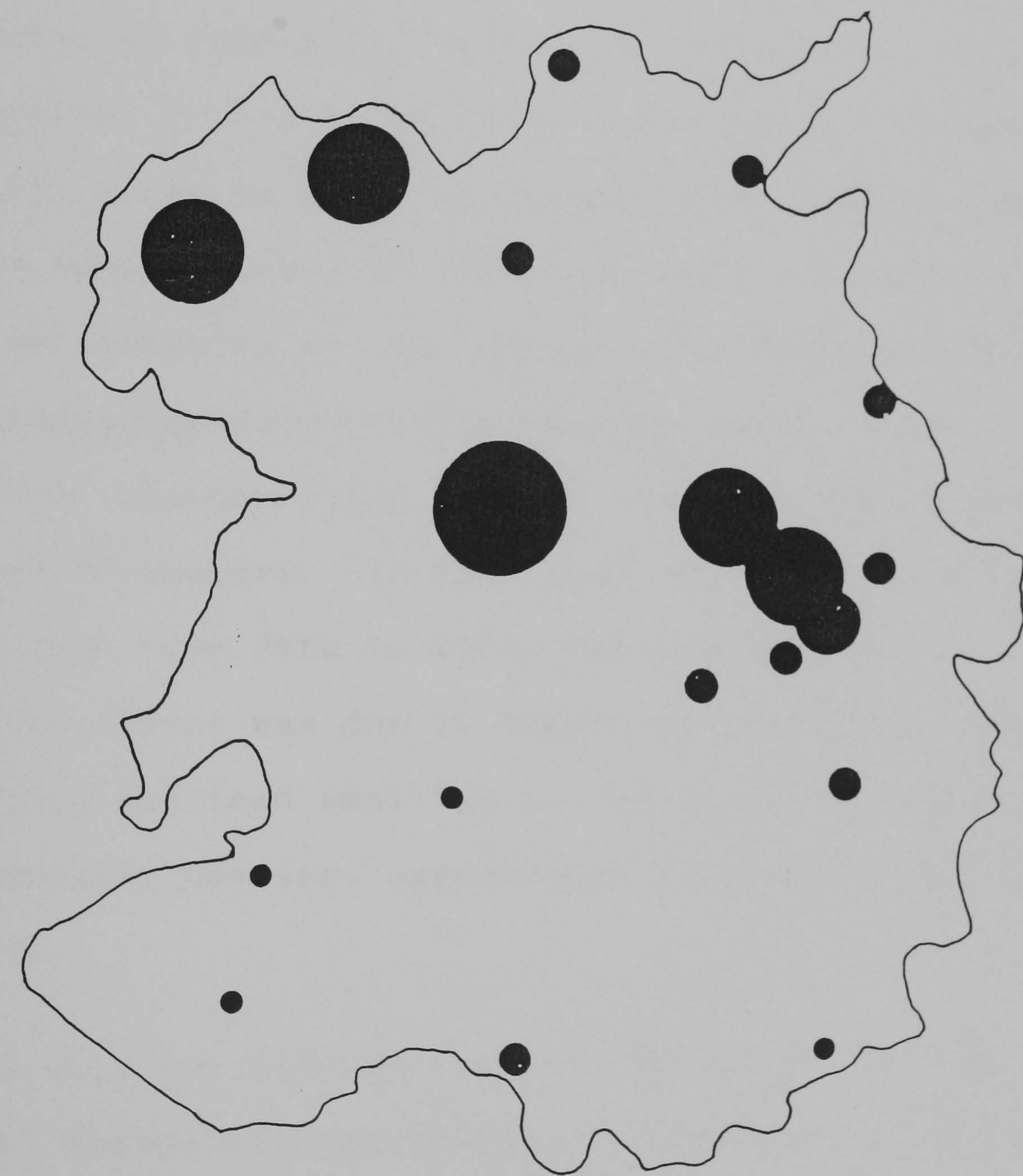
<sup>31</sup> The Bishop of Coventry and Lichfield was granted the right to hold a Tuesday market in Prees, in 1258/59 (43rd Henry III) and Bagshaw comments 'but the markets were never of much consideration, and subsequently were discontinued'. Bagshaw's Directory of Shropshire (1851), p. 301.



Figure 7.12

**The comparative size of populations of Shropshire towns, including their hinterlands, in 1871**

(based upon populations figures in the Victoria County History vol II)



Scale in thousands



This analysis also indicated how in 1851 other villages achieved a higher FI status than some towns. Ruyton XI Towns at 120 (rank 13) ranked higher than eight towns, Pontesbury at 37 (rank 24) and Claverley at 30 (rank 28) higher than the towns of Clun and Church Stretton. Table 7.7 plots the changes in rank order of eight high-status villages of which six fell in rank order between 1851 and 1871.

The reason for the evolution of high-status villages can be demonstrated by comparing Figure 7.9 with Figure 7.8 when it will be noted, that many of these high-status villages were located in the areas between the assumed hinterlands of market towns. For example, Ruyton XI Towns is roughly midway between Shrewsbury and Oswestry.<sup>32</sup> The analysis of Bagshaw's and Cassey's Directories showed that similar changes were affecting other centres lying between the towns of Shrewsbury, Welshpool and Montgomery. In this area, Pontesbury fell only slightly in rank from 24th to 29th. The reason why it maintained its status was due to industrial activity, there was coal mining and lead smelting in the area. The rural parish of Westbury however, experienced a dramatic fall from rank 34 to 94.

Although only two directories have been used in this research into Shropshire settlements, it indicates that up to 1851 certain villages located in an apparent no-man's land between town hinterlands were performing some of the trading functions of a town. Therefore they can be regarded as minor central places which declined between 1851 and 1871. This

<sup>32</sup> Edmund, Earl of Arundel had been granted a Wednesday market at Ruyton in 1311/12 (5 Edw. 2) but Bagshaw stated that it was obsolete. Bagshaw's Directory of Shropshire (1851). p. 196.



Table 7.7 VILLAGE CENTRAL PLACES 1851 - 1871

Showing the number of carrier journeys each week from the village to nearby towns, the number of carriers listed as operating to or from that village (in brackets) and the rise or fall in the rank order of function.

Name of Village	Rank Order	1851 Number of Carrier Journeys	1861 Number of Carrier Journeys	Rank Order	1871 Number of Carrier Journeys	Rank Order Fall Rise
Baschurch	41	4 (2)	5 (3)	33	3 (1)	+ 8
Claverley	28	4 (2)	9 (5)	40	8 (4)	-12
Kinnerley	31	4? (2)	2 (2)	32	2 (1)	- 1
Pontesbury	24	0 (0)	13 (4)	29	8 (2)	- 5
Prees	9	3 (3)	3 (3)	28	1 (1)	-19
Ruyton XI	13	1? (2)	6 (3)	27	4 (3)	-14
Stottesdon	53	1? (1)	0 (0)	21	2 (2)	+32
Westbury	34	7 (4)	7 (4)	94	6 (3)	-60

Table 7.8 CARRIER JOURNEYS - NUMBER OF JOURNEYS PER DAY & DESTINATION

Village	Year	Shrewsbury Mon. Wed. Sat. md. md.			Oswestry Wed. Sat. md. md.		Br'north Sat. md.		Wolves. Wed. Sat. md.	
Baschurch	1851	1	1	2						
	1861	1	1	3						
	1871	1	1	1						
Claverley	1851								2	2
	1861								5	4
	1871								4	4
Kinnerley	1851		?		2?					
	1861			1	1					
	1871				1					
Pontesbury	1851	0	0	0						
	1861	4	4	4						
	1871	1	2	2						
Prees	1851			3						
	1861		3	3						
	1871			1						
Ruyton XI	1851			1?						
	1861		2	3		1				
	1871		1	2	2					
Stottesdon	1851							?		
	1861							0		
	1871							2		
Westbury	1851		3	4						
	1861		3	4						
	1871		3	3						

? = uncertain figure. Pontesbury to Shrewsbury daily service in 1861-71.



decline can be attributed to towns like Shrewsbury extending their hinterlands, and to the development of local carrier services as is indicated in Tables 7.7. In Table 7.8 it is made clear that the villages of Baschurch, Ruyton XI Towns, Kinnerley, Westbury and Pontesbury (all located in a crescent-shaped area west of Shrewsbury) were well served by local carriers linking them, on market days, to Shrewsbury, and to a lesser extent to Oswestry. Another transport factor which contributed to the decline of some of the villages as 'central-places' was the opening of local stations on the railway network, Baschurch (1848), Kinnerley (1866), Pontesbury (1861), Prees (1858) and Westbury (1862).<sup>33</sup>

In areas which were never served by the railway network, 'local' carrier services were of greater importance. By 1871, the village of Stottesdon, located between Bridgnorth and Cleobury Mortimer, was served by a carrier who linked it to Bridgnorth. In East-Shropshire, the village of Claverley was served by a regular carrier-service linking it to Wolverhampton in Staffordshire. Neither of these high-status villages were near to a railway station.

#### The analysis of Shropshire's town hinterland populations.

In this analysis, the chosen survey area is the county of Shropshire, which has been regarded as an independent functioning system. However, it needs to be recognized that town hinterlands are not necessarily contained within a county boundary. For example, Newport, Oswestry and Whitchurch are

<sup>33</sup> R. K. Morris, 'A gazetteer of passenger railway stations in Shropshire.' T. S. A. S., vol. 64 (1985), pp. 89-105.



situated close to the county border, and their hinterlands take in areas in surrounding counties. Similarly towns like Montgomery, Knighton, Tenbury and Bewdley, situated outside the county, had hinterlands which included certain Shropshire parishes. Lewis, when explaining the area of his research in mid-Wales and the Borders, warns of the need for care in choosing an overall area of study:

'This rural area, which contains an array of central places from regional shopping centres down to small service villages, was considered to be a functioning system. There is little need to stress the importance of giving close attention to the definition of the field area... numerous workers have noted that unless the centres in the area under study are independent in a functioning system the derived results will relate to a meaningless abstraction.'<sup>34</sup>

In Shropshire, the town of Shrewsbury was at the pinnacle of a local hierarchical system. It was surrounded by market towns that formed a pattern not unlike the Christaller model (see Figure 1.8 page 24 above) and as has been demonstrated above some villages were acting as 'central places' in the apparent hinterland gaps between certain towns. With the caveat, that there could have been some overlap of influence from the towns on the border, it is argued that for comparative purposes the county can be regarded as a functioning system.

It has already been noted that there is no simple method of delineating the hinterland of a particular town. One method that appears to be relevant, is the circulation area of a town newspaper, but a study of the Bridgnorth Journal in the 1860's

<sup>34</sup> Lewis. 'The analysis of changes', p. 49.



showed that it had a very wide area of circulation that included other towns.<sup>35</sup> Further, support for the building of the Bridgnorth Agricultural Hall in 1867 was drawn from a wide area and this supports the conclusions of Kivell that 'The irresolute nature of hinterland boundaries and the way in which they vary according to the function being considered, means that there is substantial spatial overlap between zones of influence of adjacent centres of similar rank.'<sup>36</sup>

It appears therefore, that although farmer's wives could shop in a town when their husbands attended a market, the market-town visited was not necessarily the nearest to their farm. Agricultural markets were therefore a special case as is shown by the wide area covered by the corn-merchants agent George Griffiths.<sup>37</sup>

Apart from agricultural marketing, and for the purpose of establishing the population of a each market town's hinterland, various assumptions have been as to the extent of

<sup>35</sup> The Bridgnorth Journal as well as containing news on local villages also carried some reports from the towns of Bewdley, Kidderminster, Stourbridge, Wolverhampton, Much Wenlock, Broseley and Wellington.

<sup>36</sup> Report of those attending the inaugural dinner of the new Agricultural Hall in the Bridgnorth Journal, (19 January 1867). The area covered by those attending was similar to the coverage of the newspaper. Kivell, a geographer undertook a survey of current shopping habits and used the results as a basis for delineating the area served by a town's traders. P.T. Kivell, 'Hinterlands of rural-urban interaction with special reference to the north-west Midlands of England' Geographia Polonica, No. 24 (1972).

<sup>37</sup> Griffiths was based in Bewdley for a time and covered the markets of Bridgnorth, Kidderminster, Cleobury Mortimer, Ludlow and Shrewsbury. Of the latter he comments 'a very pleasant market to attend, as I met many of the farmers there who attended Ludlow on Mondays.' G. Griffiths, Going to Markets and Grammar Schools, 1830-1870 (1870), p. 135.



a town's hinterland. By using the analysis undertaken for Figures 7.7 and 7.8 above, relating them to the surrogates discussed on page 329 above; and by studying the road structures around towns, and considering any natural barriers, such as ranges of hills or major rivers, which could affect their routes; it was possible to estimate which parishes were probably within the hinterland of a particular town.

The final result which is mapped as Figure 7.13 shows that certain parishes beyond the county boundary have been included within the survey area. It shows also, how some geographic features have affected the extent of certain town hinterlands. For example, the hinterland of Wenlock was an elongated area to the south-west of the town, following the valley of the river Corve until it met an area of the same valley which was served by carriers and postal services from Ludlow. The north-westerly line of this hinterland followed the escarpment of Wenlock Edge which was (and still is) a barrier for those living in the parishes to the north-west. Therefore, the population of the parishes located to the north-west of this feature tend to look towards Shrewsbury for marketing purposes, although by mileage they are closer to the town of Much Wenlock.

In the southern part of the county, the Clee Hill massif also formed a natural barrier between the towns of Ludlow to the west and Cleobury Mortimer to the east. Their hinterlands were divided at the summit of Titterstone Clee Hill. The parishes of Ditton Priors and Cleobury North, on the north-east edge of Brown Clee Hill, were aligned to Bridgnorth because the road structure of that area pointed



Figure 7.13

## SHROPSHIRE TOWN HINTERLANDS

Parishes allocated to each Market Town for  
Population Analysis

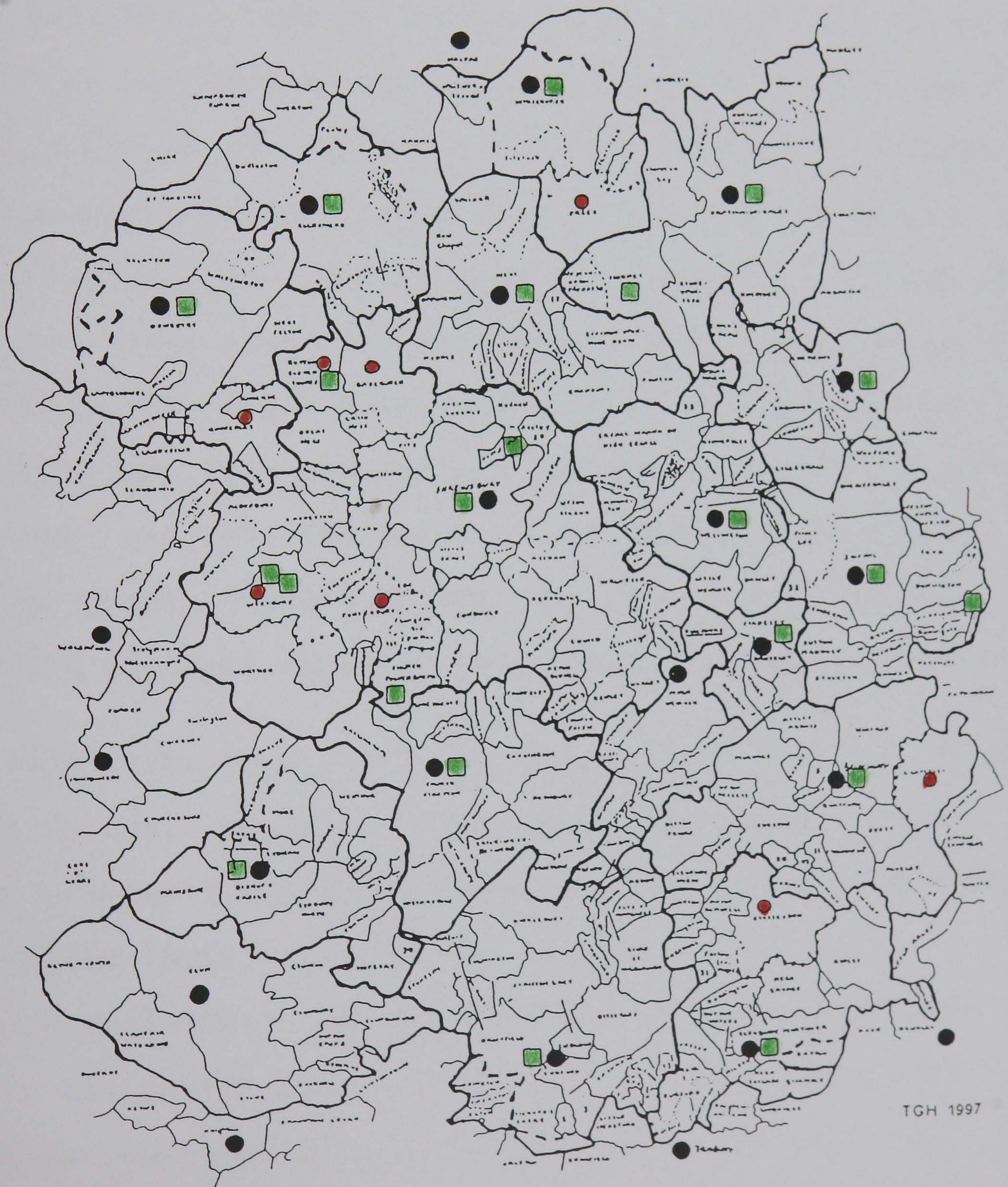
Based upon R. Morgan's Map of Ancient Parishes (1983)

Market Towns ● Fairs ■ High Status Villages ●

Hinterland Boundary ———

County boundary crossed by a hinterland - - - -

Estimated boundary of High Status Village ·····





toward that town, rather than southwards to Cleobury Mortimer or over the Clee ridge to Ludlow.

For the purpose of evaluating the area served by each town, the village hinterlands shown as sub-sections in Figure 7.13 are counted within the town hinterlands. Therefore, the parish of Prees has been counted with Whitchurch and the areas around Ruyton XI Towns, Westbury and Pontesbury as part of the hinterland of Shrewsbury.

The population figures for the census years 1801 to 1871 for the town hinterlands are shown as Table 7.9. This table has been arranged in rank order for the year 1801. It shows that Shrewsbury had the largest population throughout the whole period (and covered the largest acreage). It shows that in 1801 six other towns had hinterlands with a population in excess of 10,000, eight towns had a population of between 5,000 and 9,900, Clun and Wenlock had populations below 3,700. Between 1801 and 1871 the county of Shropshire had a mean population growth overall of 48%, but there was a minimal movement in the rank order of the town hinterland populations.

In 1871 eight towns were in the same rank position as they had been in 1801, these included Shrewsbury and Wellington with the highest ranking positions. The hinterland of Wellington included an extensive area of the East Shropshire coal-field, and therefore industrialization was a factor in its position. The four smallest town-hinterland populations remained constant in position throughout the period. The greatest position variation was for Shifnal which rose from 7th position in 1801 to 4th position in 1871 and, as



Table 7.9

SHROPSHIRE TOWN HINTERLAND POPULATIONS: 1801-1871 IN RANK ORDER OF 1801

TOWN HINTERLAND	ACRES	1801	1811	1821	1831	1841	1851	1861	1871
SHREWSBURY	145701	32754	35545	40008	42840	44846	46852	46721	46783
WELLINGTON	39706	16022	18427	19421	22761	26190	27062	30283	30854
LUDLOW	83317	13493	14222	15727	16828	16738	16390	17022	17466
OSWESTRY	63819	12789	14205	15923	17697	18407	18150	19036	21439
BRIDGNORTH	62486	12366	12318	12667	14028	15459	15351	15695	15246
BROSELEY	15809	11756	12089	12340	12139	14432	15318	16180	16014
SHIFNAL	44559	11091	12137	12946	13617	14496	15482	17737	19351
DRAYTON	59841	9062	10017	11347	11947	12072	12156	12349	12788
WHITCHURCH	41572	9057	9771	10891	11370	11963	11385	11330	11683
ELLESMERE	38280	8316	8850	9564	10372	10554	10338	9985	10004
NEWPORT	28765	7874	8910	9540	10906	11003	11558	11527	11934
WEM	42826	7455	7385	8353	8747	8916	8324	8540	8703
BISHOPS CASTLE	68591	7398	8114	8583	9198	9099	9051	9323	9426
CLEOBURY MORTIMER	53516	7254	8104	8186	8211	8105	7997	7844	7969
STRETTON	53868	5084	5570	6236	6501	7048	7104	7118	7210
CLUN	50467	3665	4141	4180	4690	5029	5136	5444	5573
WENLOCK MUCH	21880	3248	3449	3587	3861	3940	3761	3784	3801

Table 7.10

SHROPSHIRE TOWN HINTERLAND POPULATIONS: 1801-1871 IN RANK ORDER OF GROWTH

TOWN HINTERLAND	ACRES	1801	1811	1821	1831	1841	1851	1861	1871	% GROWTH 1801-71
WELLINGTON	39706	16022	18427	19421	22761	26190	27062	30283	30854	93
SHIFNAL	44559	11091	12137	12946	13617	14496	15482	17737	19351	74
OSWESTRY	63819	12789	14205	15923	17697	18407	18150	19036	21439	68
CLUN	50467	3665	4141	4180	4690	5029	5136	5444	5573	52
NEWPORT	28765	7874	8910	9540	10906	11003	11558	11527	11934	52
SHREWSBURY	145701	32754	35545	40008	42840	44846	46852	46721	46783	43
STRETTON	53868	5084	5570	6236	6501	7048	7104	7118	7210	42
DRAYTON	59841	9062	10017	11347	11947	12072	12156	12349	12788	41
BROSELEY	15809	11756	12089	12340	12139	14432	15318	16180	16014	36
LUDLOW	83317	13493	14222	15727	16828	16738	16390	17022	17466	29
WHITCHURCH	41572	9057	9771	10891	11370	11963	11385	11330	11683	29
BISHOPS CASTLE	68591	7398	8114	8583	9198	9099	9051	9323	9426	27
BRIDGNORTH	62486	12366	12318	12667	14028	15459	15351	15695	15246	23
ELLESMERE	38280	8316	8850	9564	10372	10554	10338	9985	10004	20
WENLOCK MUCH	21880	3248	3449	3587	3861	3940	3761	3784	3801	17
WEM	42826	7455	7385	8353	8747	8916	8324	8540	8703	17
CLEOBURY MORTIMER	53516	7254	8104	8186	8211	8105	7997	7844	7969	10



has been mentioned above, included part of the East-Shropshire coalfield area. Like Wellington this rise can be attributed to growth of the population due to industrialization. Ludlow however fell from 3rd position to 5th position, and this suggests that, although the industrial area of Clee Hill was included in its hinterland, it was not having a marked effect on this town's rank order at the time.

As Table 7.10 shows, the varied growth rate of the hinterland populations between 1801 and 1871 was a factor in these changes. In 1801 Shrewsbury had a hinterland population of 32,754 which was over twice that of its nearest rival Wellington (16,022). By 1871 the population of Shrewsbury (46,783) had risen by 43%, but that of Wellington (30,854) had risen by 93%. Shifnal too showed a rise of 74% over the entire period. Another town whose hinterland population showed considerable expansion was Oswestry, which rose by 68% from 12,789 in 1801 to 21,439 in 1871. This too can be attributed to industrial developments in its hinterland, and the fact that it became an important railway centre. What is rather surprising is that town hinterlands such as Clun and Stretton also had growth in percentage terms. This indicates that there was also some population expansion in rural areas, for example, in the hinterland of Clun, which never had a railway. For Stretton the rise can be attributed to its position in what some writers describe as 'The Highlands of Shropshire', (Plate 7.1). During the Napoleonic wars much of Europe had been cut off for followers of the 'Grand Tour', so areas in Britain like western Shropshire had become popular for their 'picturesque' scenery. Later, the opening of the railway also had a marked effect on tourism to this area, and the town



Plate 7.1



'The Burway' Church Stretton.  
From a print held in the Local Studies Library, Shrewsbury.



began to expand to provide facilities for day trippers, as well as for tourists who wanted to stay for longer periods. In this period, the number of inns and hotels in Church Stretton rose from six in 1820 to fifteen in 1871.

Between 1801 and 1871, in population terms the Shropshire town hinterlands appear to be relatively stable. Two factors which could cause growth were industrialization and tourism, and it appears that the opening of the railway was a factor in this pattern. Therefore, if transport systems were improving; industrialization was having an effect on wealth creation; and the demand for goods and services was rising; it can be expected that town traders (the suppliers) would respond to this demand and therefore a growth in a towns economic function could be expected.

#### Measuring the trading and transport function of towns.

To examine the changing function of towns, a second database was used. The method of analysis was the same as that described on page 331 above. For each town the numbers of traders in the fifty categories (Appendices 7 and 8) were counted from one trade directory in each of the periods 1820, 1830, 1840, 1850, 1860 and 1870. A location co-efficient was calculated for each trade group, and the results were expressed as a functional index for each town in each period.

Some of the difficulties encountered in this part of the analysis need to be appreciated. Because of the economic impact of the new market-centres of Ironbridge, Dawley and Oakengates they could not be ignored or counted within an



existing town hinterland, therefore a revision of hinterlands in this area was undertaken and their areas of influence separated from the hinterlands of surrounding towns. Further there were no separate directory entries for Dawley or Ironbridge in the earlier periods, although the numbers of traders for some of these centres could be extracted from the surrounding towns. The data on transport systems which were specific to these new market centres is however lacking; no figures for Oakengates existing before 1871, when it was listed as a separate market centre. For this analysis Madeley Broseley, and Ironbridge have been counted as one centre. Also there were no directory entries for Clun before 1840. Therefore, although it was possible to measure changes in the hinterland populations for all the market centres, there was variability in the number of centres that were included for comparison of the trading and transport functions.

The functional indices for each market centre, are shown in rank order for each period in Table 7.11. This indicates that the town of Shrewsbury dominated the county throughout the overall period. This finding is reflected in the research of Lewis whose wider study area is shown at Figure 7.14. His period of research was 1828/31 to 1964/5 and he says:

'Overall, Shrewsbury and Hereford (ranked highest throughout the period) have consolidated their status within the study area, whilst lower-ranked centres, have experienced a relative diminution in status... Within this pattern, a number of lower-ranked centres showed upward movements in the second half of the nineteenth century under the influence of local stimuli, but these were not great enough to obscure the general widening of status differences.'<sup>38</sup>

<sup>38</sup> Lewis, 'The analysis of changes', pp. 57-58.



Table 7.11

SHROPSHIRE TOWNS & MARKET CENTRES - TRADING FUNCTIONAL INDEX IN RANK ORDER AND NUMBER OF CENTRES PER PERIOD (1820s - 1870s)

1820's	TRADE FI	1830's	TRADE FI	1840's	TRADE FI	1850's	TRADE FI	1860's	TRADE FI	1870's	TRADE FI
SHREWSBURY	1405	SHREWSBURY	1393	SHREWSBURY	1384	SHREWSBURY	1339	SHREWSBURY	1322	SHREWSBURY	1410
LUDLOW	458	LUDLOW	508	LUDLOW	517	OSWESTRY	435	OSWESTRY	408	LUDLOW	406
WHITCHURCH	377	OSWESTRY	430	OSWESTRY	446	LUDLOW	402	LUDLOW	401	OSWESTRY	393
OSWESTRY	337	BRIDGNORTH	392	DRAYTON	340	BRIDGNORTH	383	BRIDGNORTH	369	BRIDGNORTH	327
BRIDGNORTH	322	WELLINGTON	314	BRIDGNORTH	329	WELLINGTON	376	WELLINGTON	344	WELLINGTON	320
DRAYTON	295	WHITCHURCH	294	WHITCHURCH	306	WHITCHURCH	272	WHITCHURCH	263	WHITCHURCH	290
WELLINGTON	286	DRAYTON	223	WELLINGTON	267	DRAYTON	229	NEWPORT	262	DRAYTON	248
BISHOPS CASTLE	212	NEWPORT	199	NEWPORT	194	NEWPORT	225	DRAYTON	253	IRONBRIDGE/MADELEY	225
CLEOBURY MORTIMER	195	BROSELEY	177	ELLESMERE	194	IRONBRIDGE/MADELEY	205	IRONBRIDGE/MADELEY	216	ELLESMERE	175
NEWPORT	182	WEM	174	WEM	177	ELLESMERE	193	ELLESMERE	186	NEWPORT	171
WEM	178	IRONBRIDGE/MADELEY	173	IRONBRIDGE/MADELEY	174	BROSELEY	160	WEM	158	CLEOBURY MORTIMER	145
ELLESMERE	164	ELLESMERE	168	SHIFNAL	127	SHIFNAL	150	BROSELEY	154	BROSELEY	131
SHIFNAL	133	SHIFNAL	150	BROSELEY	125	WEM	139	SHIFNAL	136	SHIFNAL	131
IRONBRIDGE/MADELEY	128	BISHOPS CASTLE	83	BISHOPS CASTLE	90	CLEOBURY MORTIMER	105	DAWLEY	106	DAWLEY	123
BROSELEY	112	WENLOCK	81	WENLOCK	77	BISHOPS CASTLE	105	BISHOPS CASTLE	97	WEM	121
WENLOCK	68	CLEOBURY MORTIMER	81	CLEOBURY MORTIMER	65	WENLOCK	82	CLEOBURY MORTIMER	92	BISHOPS CASTLE	114
STRETTON	40	STRETTON	51	CLUN	64	DAWLEY	80	WENLOCK	73	OAKENGATES	85
DAWLEY	0	DAWLEY	0	DAWLEY	57	STRETTON	59	STRETTON	65	WENLOCK	72
				STRETTON	56	CLUN	51	CLUN	59	STRETTON	65
										CLUN	39
18 MARKET CENTRES		18 MARKET CENTRES		19 MARKET CENTRES		19 MARKET CENTRES		19 MARKET CENTRES		20 MARKET CENTRES	



Figure 7.14

The study area of C. R. Lewis for:  
The analysis of changes in urban status.

A case study in Mid-Wales and the middle Welsh Borderland.

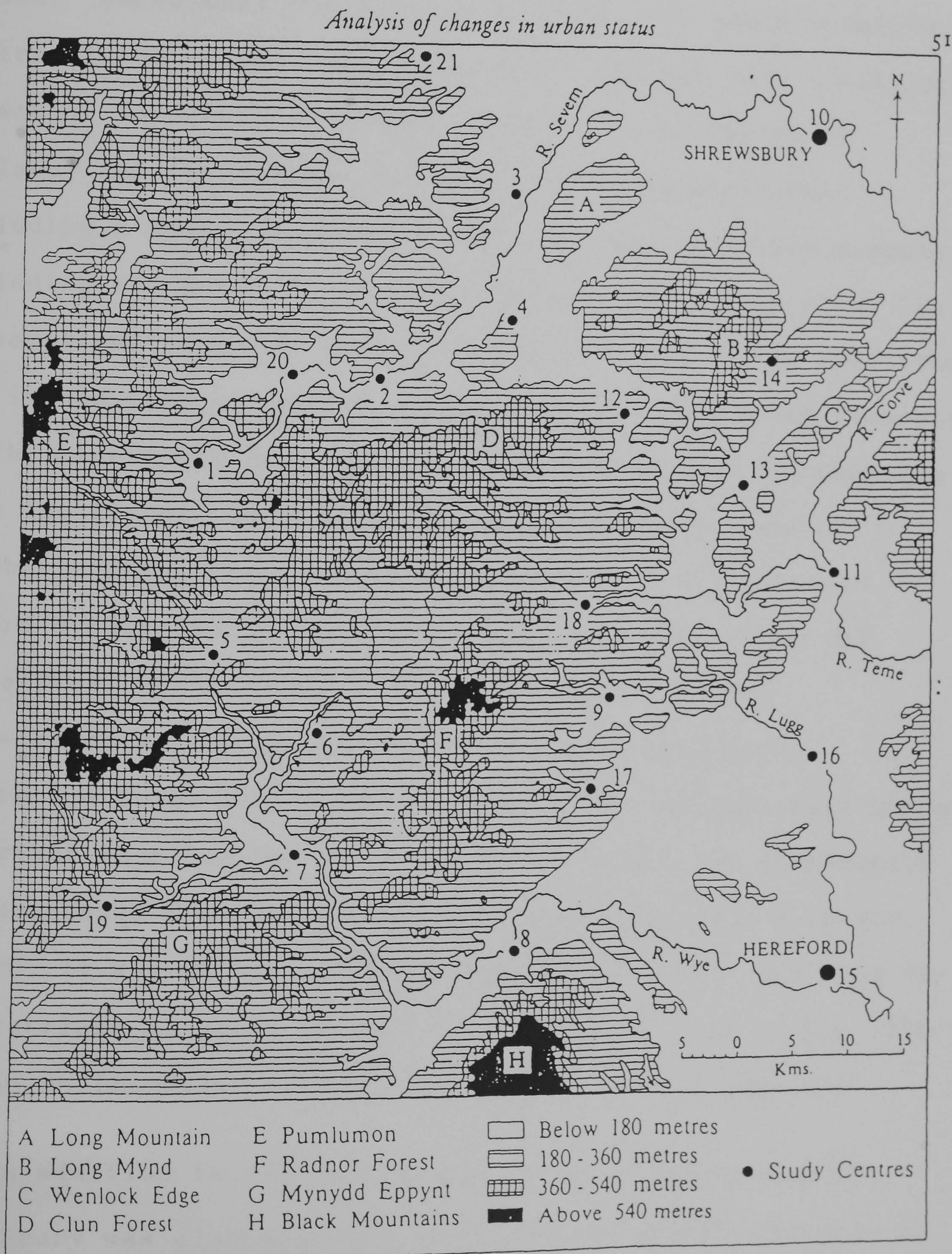


FIGURE-1. The study area

From: *The Institute of British Geographers - Transactions*

1971 (1972) - 54



In Lewis' research it was Shrewsbury, rather than the cathedral city of Hereford, which held the first rank position throughout the period. As Table 7.11 indicates the pattern described by Lewis is also true for the county of Shropshire.

The status of Shrewsbury is reflected by its high functional index which far exceeded its nearest rivals in every period. Shrewsbury was a royal borough, the administrative centre of the county, and although it did not have a cathedral it was an important religious centre for the Church of England, and for various non-conformist denominations, including a Welsh speaking church. It contained many schools, including the Royal Free Grammar School founded in 1552. The medieval wealth of Shrewsbury had been built on the wool trade and it had been an important market-centre for Welsh flannels. By the nineteenth century this trade had almost vanished and only two flannel merchants are recorded in the town in Bagshaw's Shropshire Directory (1851). This does however record a flax-spinning factory which employed around 800 operatives, and stresses the importance of several iron-foundries and makers of agricultural implements. Figure 5.4 (page 250 above) shows that Shrewsbury still had an important wharf on the river Severn and with its nineteenth-century canal link still had some importance as a waterway centre. It was at the hub of a road network that provided for the carriage of goods as well as passengers, and by the 1870's it was an important railway centre (Figure 6.7 page 298).

In addition to its importance in trade and transport, Shrewsbury was also a social and cultural centre. Between St. Chad's Church and the River Severn a twenty-acre public park



called 'The Quarry' was laid out with gardens, avenues of lime trees and a bandstand.<sup>39</sup> A theatre was opened in 1834, and a Music Hall and Public Rooms in 1840. The Mechanic's Institute was founded in 1833 and the Shropshire and North Wales Natural History and Antiquarian Society, established in 1835, created a museum and library.

The high functional index of Shrewsbury in the nineteenth century was therefore influenced by a multitude of factors. Other towns with a high functional index were also the result of a variety of factors. The towns of Ludlow, Whitchurch, Oswestry, Bridgnorth, Drayton and Wellington remained immediately below Shrewsbury for almost all of the period (the one exception being Drayton which was replaced by Newport in 1850). Below this group the remaining towns tended to fluctuate in rank order. Bishop's Castle at 8th position in 1820 declined to 14th in 1830-1840, then to 15th and finally to 16th position. The industrial centre of Ironbridge, at 14th place in 1820 rose to 11th then 9th and finally to 8th position. Dawley, Wenlock, Clun and Stretton remained in a comparative low rank position. Although comparisons cannot be made between the functional index figures of one period and the next, the very low FI for Clun in 1870 does suggest a place in considerable decline. This is in spite of the rise in its population percentage recorded above.

The highest position attained by Wenlock was 15th in 1830 and 1840, after which its position moved downward to

<sup>39</sup> The medieval church of St. Chad was re-built on a new site overlooking the river Severn and was consecrated in 1792. It could seat 2200 persons and became a fashionable church in an already fashionable area of the town. Bagshaw's, Directory of Shropshire (1851), pp. 33-132.



to 18th position in 1871, a slight alteration suggesting a relatively stable economic community. By reference to Table 7.9 it can be seen that Wenlock, between 1821 and 1871, also had a fairly stable population. Wenlock was a small Borough which was of little value as a centre for road transport, but it had one major industry, the extraction of limestone from Wenlock Edge. Limestone was in demand for the nearby blast-furnaces of Coalbrookdale and for the extensive agricultural area to the south and west of Wenlock. Much of the limestone was processed by burning on site, and was therefore available in a form used by agriculture.

The first railway line to Wenlock opened in 1862. It initially linked the town, and a large limestone quarry at Farley, to Buildwas on the newly opened line from Kidderminster, via Bridgnorth, to Shrewsbury (The Severn Valley Railway). Buildwas was also on a line that crossed the river Severn and passed through the industrial area, via Coalbrookdale, to the main Birmingham and Shrewsbury line at Wellington. In 1864, this line was extended south-westwards along Wenlock Edge to another large quarry site at Presthope. Eventually a tunnel was excavated through Wenlock Edge, allowing the line to link up with the main Shrewsbury to Hereford line at Craven Arms in 1867. It was the coming of the railway that linked the limestone industry of Wenlock Edge to a wide agricultural and industrial market, and this kept the Wenlock economy and population stable throughout the period.

There were however, very different economic factors at work in another small town, Church Stretton, whose picturesque attractions were mentioned on page 360 above. Although in



rank terms it shared a low position with Wenlock and Clun it was not a place in decline. This was reflected in 1870 by a FI of 65 and by a rising population.

Among the highest towns in rank-order, Oswestry and Ludlow jostled for second position throughout the period. In population terms Oswestry was in third place behind the industrialized area of Wellington from 1821-1871 and had a population growth of 68% over the period 1801-1871. Its high trading status and growth can be attributed, in part, to the mining and quarrying area located in its southern hinterland, to the development of mills along the Morda valley, and to its position on the Welsh border. Bagshaw's Directory (1851) stated: 'Oswestry is one of the principle towns on the Welsh borders, and is now the most flourishing and prosperous of any in the county'. It then waxes lyrical about its attractions:

'Towards Wales, the alpine heights and lovely vales are seen in rich profusion; and here the beholder glances upon a country which was eminently distinguished as the birth-place and residence of the children of freedom -- a people, who, by their independent spirit and martial prowess, for centuries chastised rapacity and injustice and made oppression and tyranny tremble upon the throne.'<sup>40</sup>

In spite of such a eulogy, Oswestry cannot be seen as a town that grew very much from tourism, but more because of its industrial and commercial activity and its particular importance as a railway town.<sup>41</sup>

<sup>40</sup> Bagshaw's, Directory of Shropshire, p. 164.

<sup>41</sup> J. P. Jones, Oswestry a Local History (1994), records how the first railway-line to Oswestry built in 1848 was a spur from the Shrewsbury and Chester main-line. By 1862 a station had been built for the Cambrian Railway and from that period Oswestry developed as an important junction for lines into Wales, to Whitchurch and the Potteries, as well as becoming the headquarters of the Cambrian Railway company.



Ludlow retained its high status in spite of the fact that it moved to fifth place in terms of population (Table 7.9) its growth being only 29% between 1801 and 1871 (Table 7.10). Like Shrewsbury it was a royal-borough, and since the Middle Ages had been an administrative centre, with its castle the residence of the lord presidents of the Welsh Marches. In the eighteenth century a number of elegant mansions were built, such as Dinham House and also a number of houses that occupied the burgage plots in Upper Broad Street, Plates 7.2 and 7.3 demonstrate the contrast between this fashionable end of Broad Street and its counterpart, Lower Broad Street, outside the town gate. In Lower Broad Street (1829) the use of pack-horses may be noted. The reason for the continuation of Ludlow's high status can be attributed in part to fashion. It contained many large town houses and by the end of the eighteenth century had developed as a place for fashionable balls and assemblies. In 1840 new Public Rooms were built which housed the 'Assembly Rooms', a reading room and a museum, and in 1841 the Ludlow Library and Mechanics Institute was founded.

Bagshaw commented on the fashionable attractions of Ludlow and mentioned how one town-based industry was in decline:

'The glove trade formerly employed upwards of a thousand hands here, but owing, it is thought, to the introduction of French gloves, and the establishment of marts for articles of a cheaper fabrication in Leicestershire and Nottinghamshire, the trade declined some years ago, and has now become almost extinct.' he further comments: 'The town has, however, been kept in a flourishing state by the numerous respectable residents which the extreme beauty of its situation has attracted to it.'<sup>42</sup>

This statement on the decline of the glove making industry is supported in Pigot and Slater's Directories of Shropshire.

<sup>42</sup> Bagshaw, Directory of Shropshire, p. 592.



Plate 7.2

Upper and Lower Broad St. Ludlow.

Two nineteenth century drawings copied from:

D. Lloyd *Broad St. its houses and residents through eight centuries*  
Ludlow Research Paper No. 3 (Birmingham 1979)



Fig. 8. Broad Street c.1810 by an unknown artist.

Plate 7.3



Fig. 10. Lower Broad Street in 1829, just before Thomas Telford's improvements. Painted by Ziegler.



In 1822 they listed nine glove manufacturers which by 1835 had reduced to five and by 1850 to one. Bagshaw also recorded that malting was still an important industry, that a paper-mill was still operating and that there was an establishment for the manufacture of blankets. Although Ludlow had within its hinterland the industrial area on Titterstone Clee Hill, it was its importance as a fashionable centre which was the primary cause of its continuing high status.

In a lecture called The Growth of the Welsh City System, in 1969, Harold Carter commented on the spacing of towns and their evolution into a hierarchy. He said: 'Further development results in a sorting out of the situation into specific bundles of functions becoming located at particular nodal points, a whole series of political, social, and personal factors being involved, until the whole becomes resolved into a hierarchical system in a relative equilibrium.'<sup>43</sup> he then quoted from Luckermann, that a nodal location is a place that 'involves both population density and a real accessibility as well as functional availability.'<sup>44</sup> He also comments upon an argument expressed by René Lachéne, that a transport network evolved as a factor of nodality:

'At time  $t_1$  the first transport network is created consisting of simple roads of small capacity and demanding little capital so that only villages are touched (the underlying grid). Development continues and towns appear

<sup>43</sup> H. Carter, The Growth of the Welsh City System, an inaugural lecture, University College of Wales, Aberystwyth (1969), p. 10.

<sup>44</sup> F. Luckermann, 'Empirical expressions of nodality and hierarchy in a circulation manifold', The East Lakes Geographer, 2 (1966), p. 22.



at some intersections but not all. The reasons may be due to higher potential or just chance... It is now time to further development and new transport techniques create a new network (say a railway) requiring heavier capital expenditure, and this will probably only touch a limited number of towns and will be built to serve the already pre-eminent.'<sup>45</sup>

He then takes the discussion into the motorway age, but warns that 'this model is in many ways over simple for it ignores cultural and traditional factors and each new phase of development is accordant with earlier conditions, but it surely represents the way in which the city system develops.'<sup>46</sup>

The need of an analytical method to measure the utility of transport systems.

There was, however, a major obstacle to be overcome in a study which seeks to measure the relationship between changes in transport systems and trading functions. As is demonstrated above, there are acceptable forms of measurement which can be applied to changes in trading function, and there are fairly reliable population figures from which growth and decline can be measured. However, there appears to be a lack of a statistical method by which changes in nineteenth-century transport functions can be assessed.

<sup>45</sup> Carter, The growth of the Welsh City System, p. 11; R. Lachene, 'Networks and the Location of Economic Activities' Reg. Sci. Assoc. Papers, xiv (1964), p. 183.

<sup>46</sup> H. Carter, The growth of the Welsh City System (1969), p. 11; Carter's comments on a likely connexion between the function of towns and transport system are mentioned again in Carter and Lewis, An Urban Geography of England and Wales. They cite the models of urban growth by E. A. Wrigley (1978) (p. 37) and A. Pred (1977) (p. 46). In both of these models the improvement or expansion of transport systems was considered as a factor in the growth of towns.



The only method available appeared to be one used by Freeman in 1977. He undertook a study of carrier routes between Hampshire towns in the period 1775 to 1851.<sup>47</sup> In the introduction to his research, he mentioned the increase in population, the expansion of particular towns, and also commented upon the changing commercial and industrial activity in the area. Freeman used a statistical method which he called 'gross vertex connectivity'. He explained, that 'vertex connectivity' referred to the number of inward and outward carrier journeys per week to each centre. These were summed for the entire area to give a 'gross vertex connectivity' figure and then graphed to demonstrate changes in carrier activity. As mentioned in chapter two (pages 63-64 and 81-82 above) the measurement of the number of carrier journeys, as an indicator of the growth of the carrying trade is not beyond criticism.

At first sight Freeman's methodology appeared to be useful, but it only related to road carrying services. In this thesis there was a need for a statistical method that would cover the inward and outward journeys by road, rail, and waterway, and so it was concluded that 'gross vertex connectivity' was not an option.<sup>48</sup> Therefore it was necessary to develop a method of measurement which would assess the

<sup>47</sup> M. J. Freeman, 'The Carrier System of South Hampshire, 1775-1851', The Journal of Transport History, new series, vol. IV, no. 2 (1977), pp. 61 - 85.

<sup>48</sup> Nineteenth-century trade directories tend to record the days of the week for road-carriers and similar information is occasionally recorded for barges on the waterways. Railways however, could undertake a number of journeys per day, but where time-tables for this period have survived, they tend to refer only to passenger traffic.



utility of all three forms of transport. By the mid-nineteenth century the changes being observed, were changes in transport technology. The utility of waterways was the weight of load which could be moved by a single horse, and therefore waterways were of particular importance for the movement of the raw-materials used in industry. For other goods, the utility of waterway transport can be seen as supplemental to road transport. Natural waterways nevertheless could be hampered by weather conditions such as drought, flood or frost. The utility of railways improved upon the waterways, by moving bulk goods at speed, and overcoming some of the problems caused by weather conditions. Railways also provided a faster delivery service for the goods which had been carried by the 'national' carriers. Railways also provided a service for carrying passengers, who had previously been carried by coaches and waggons.

The development of a weighted method to assess the variability of transport systems.

In creating a method of analysis for this thesis it is argued, that a town that was located on a 'national' carrier route was better served for the transfer of goods than one which was merely connected to other local towns by a 'middling' carrier route. Therefore, a weighting was required to differentiate between the utility of a 'national' carrier and that of a 'middling' carrier. Further, because a 'local' carrier merely served a town's hinterland, the utility of 'local' carriers services was related to villages rather than to the trading function of the town itself. Therefore, in



creating a measure of the utility of road transport the 'local' carrier has been ignored. There is of course an added problem that some trade directory entries, for the various types transport listed, are ambiguous. An entry for a van in one directory may be shown as an omnibus in another and in this period both could carry passengers or goods. Further, was an omnibus or van that served a nearby railway station to be regarded as a local or national service? Therefore, in deciding which entries related to a particular type of transport or route it should be understood that an element of subjective decision making has been involved.

Accepting that 'national' and 'middling' carrier routes formed the basis of the measurement of transport utility, a town that had several 'national' routes passing through it should have a higher status than one located at the end of a single route. For example, the town of Church Stretton was located on a single north-south route, whereas Shrewsbury was at the hub of many routes linking it to a variety of destinations. Therefore the number of outward directional routes from a particular town was considered to be a significant factor in measuring a town's transport function.

Although this thesis concentrates upon the movement of goods, the measurement of transport utility includes railways, which provided for the transfer of both goods and passengers. It is argued therefore that a comparative measurement would be flawed if road-passenger transport was ignored. Therefore, in this analysis of transport utility, coach services have been included and have been given the same weighting as 'national' and 'middling' carriers.



The chosen methodology was based upon a directional route from a particular town, and provided a form of measurement that could be applied to all three types of transport. The base figure chosen for this method, was a single route for a 'middling' carrier which started from a town.<sup>49</sup> Such a route was counted as '1' and that of a 'middling' carrier route which passed through a town as '2'. For a 'national' carrier a weighting of three was applied, therefore one 'national' route starting from a particular town gave a count of '3' and a single passing-through route was counted as '6'. The same criteria was used to weight coach traffic.<sup>50</sup>

Waterway links on canals or rivers were considered to be on a national scale and given a weighting of '3'. For example, Ellesmere, which had a canal route passing through it was counted as '6'. For railways a different criteria was required, because they not only provided for the transfer of both goods and passengers over long distances, but they also carried far greater loads than road carriers and more frequently than waterway transport. Further, some railway lines were built as 'branch lines', such as the one which

<sup>49</sup> Because only the directional route is being counted the number of middling carriers who operated along the route is ignored. It can be argued that this gives a flawed result, but as it is impossible to use the same criteria for the waterways and railways this appears to be the only way in which a truly comparable figure can be achieved.

<sup>50</sup> Long-distance coach services which linked provincial centres to London and to each other; and Welsh-coast routes to Shrewsbury were regarded as 'national' coaches. Short-distance coaches which linked one town to another, or a town to a distant railway station, were regarded as 'middling' coaches. Because of the ambiguity discussed above, omnibuses were included with the 'middling' coaches with the exception of those that merely linked a town centre to its own railway station.



terminated at Bishop's Castle, and some as 'main lines' which linked one provincial centre to another. Therefore, at the dates used for comparison, a weighting of six was applied to incompletd 'main lines, 'branch lines', ' and other less important lines. For completed 'main lines' a weighting of twelve was given.<sup>51</sup> In Shropshire only two lines which eventually crossed the county were considered to be in the main-line category, these were the line from London via Birmingham, Wolverhampton and Shrewsbury to Chester (completed and open from Shrewsbury to Chester in 1848 and Birmingham in 1849), and the line from Manchester via Crewe, Shrewsbury, Hereford and Newport to Cardiff (completed and open from Shrewsbury to South Wales in 1854 and to Manchester in 1858).

The data on road transport routes, mainly from one Trade Directory, and details of the number of canal and railway routes serving each town at a comparative date were calculated from a number of maps and sources.<sup>52</sup> The results are shown as Appendix 9. The raw data was then weighted according to the criteria above and summed for each town to create a 'Transport

<sup>51</sup> For example in the 1870's the railway route serving Bishop's Castle, at the end of a branch line, was counted as six to which was added a single road carrier route giving an overall total of seven. In the same period for Whitchurch which was on the 'main line' from Manchester to Cardiff it scored twelve times two, plus a minor route to Oswestry via Ellesmere which scored six thus giving a railway total of thirty plus a two directional canal routes (six) and three middling carriers (three) making an overall total of thirty-nine.

<sup>52</sup> In order to use the best possible comparable data the directories used were primarily those published by Pigot and Slater in 1822, 1835, 1842, 1850, 1856 and Kellys for 1870. For canals and railways various sources used in chapter 5 to plot the development of their routes were used to match their extent in the same period covered by the trade directories, e.g. how many directional routes served a town in 1856.



Functional Index' (Appendix 10). Using the Transport Functional Indices, the Shropshire towns were then sorted into rank order for each period as shown in Table 7.12. It will be realised that exact comparisons between one period and another are not possible because the number of towns with a functional index varies from period to period. However, generally speaking, the table indicates a change occurring between 1842 and 1850. From 1850 Shrewsbury, Wellington and Oswestry, which were all railway junctions, remained in the first three positions. Below them a number of towns jostled for position and at the lower end of the scale the towns of Clun, Bishop's Castle, Cleobury Mortimer and Wenlock were clearly of limited importance from a transport point of view.

It is also clear that Bridgnorth, which in the previous century was an important river port and the focus of many carrier routes, declined as a transport centre in the early nineteenth century. In 1856 (the date of the directory used for transport in the 1860's period) Bridgnorth was in 11th position because it still had no railway, and was not being served by either national carriers or national coach routes. In 1862 the railway had arrived providing a two directional route from Kidderminster through Bridgnorth to Shrewsbury <sup>53</sup>

<sup>53</sup> By 1856 the national coach and carrier services had largely disappeared from the landscape. The low position of Bridgnorth in terms of transport transport was not matched with a decline in its importance as a trading centre. The particular case of Bridgnorth is discussed below.



Table 7.12

SHROPSHIRE TOWNS & MARKET CENTRES - WEIGHTED TRANSPORT ROUTES AS A FUNCTIONAL INDEX IN RANK ORDER OF TOWN PER YEAR - INDICATING THE ARRIVAL OF THE RAILWAY AS (R)

TOWN RANK ORDER 1822	FUN-INY	TOWN RANK ORDER 1835	FUN-INY	TOWN RANK ORDER 1842	FUN-INY	TOWN RANK ORDER 1850	FUN-INY	TOWN RANK ORDER 1856	FUN-INY	TOWN RANK ORDER 1870	FUN-INY
SHREWSBURY	56	SHREWSBURY	57	SHREWSBURY	46	SHREWSBURY (R)	61	SHREWSBURY (R)	69	SHREWSBURY (R)	87
WHITCHURCH	29	LUDLOW	27	LUDLOW	27	WELLINGTON (R)	39	WELLINGTON (R)	43	WELLINGTON (R)	48
CLUN	23	DRAYTON	25	OSWESTRY	22	OSWESTRY (R)	36	OSWESTRY (R)	41	OSWESTRY (R)	39
WEM	19	WELLINGTON	25	BROSELEY/IRONBRIDGE	21	SHIFNAL (R)	32	WEM (R)	35	WHITCHURCH (R)	39
BISHOPS CASTLE	18	NEWPORT	22	WELLINGTON	21	BRIDGNORTH	26	WHITCHURCH (R)	33	WEM (R)	27
BRIDGNORTH	18	OSWESTRY	22	WHITCHURCH	21	LUDLOW	24	LUDLOW (R)	29	LUDLOW (R)	26
ELLESHERE	17	BRIDGNORTH	20	BRIDGNORTH	20	OAKENGATES (R)	24	STRETTON (R)	28	STRETTON (R)	25
OSWESTRY	17	BROSELEY/IRONBRIDGE	20	DRAYTON	17	BROSELEY/IRONBRIDGE	23	SHIFNAL (R)	27	DRAYTON (R)	24
BROSELEY/IRONBRIDGE	15	WHITCHURCH	19	ELLESHERE	14	NEWPORT (R)	21	OAKENGATES (R)	24	OAKENGATES (R)	24
NEWPORT	12	ELLESHERE	17	NEWPORT	13	DRAYTON	16	NEWPORT (R)	18	SHIFNAL (R)	24
SHIFNAL	12	SHIPNAL	12	WEM	11	WHITCHURCH	12	BRIDGNORTH	15	BRIDGNORTH (R)	20
WELLINGTON	12	WEM	11	SHIFNAL	10	CLEOBURY MORTIMER	8	BROSELEY/IRONBRIDGE	12	ELLESHERE (R)	18
WENLOCK	7	BISHOPS CASTLE	9	STRETTON	8	STRETTON	8	DRAYTON	10	NEWPORT (R)	18
STRETTON	6	STRETTON	8	CLEOBURY MORTIMER	7	ELLESHERE	7	ELLESHERE	9	CLEOBURY MORTIMER (R)	14
DRAYTON	5	CLEOBURY MORTIMER	6	WENLOCK	6	WEM	6	BISHOPS CASTLE	4	BROSELEY/IRONBRIDGE (R)	13
CLEOBURY MORTIMER	2	WENLOCK	3	CLUN	5	WENLOCK	5	WENLOCK	3	WENLOCK (R)	12
CLUN	0	CLUN	0	BISHOPS CASTLE	4	BISHOPS CASTLE	4	CLEOBURY MORTIMER	2	BISHOPS CASTLE (R)	7
DAWLEY	0	DAWLEY	0	DAWLEY	3	CLUN	2	CLUN	1	DAWLEY (R)	6
OAKENGATES	0	OAKENGATES	0	OAKENGATES	0	DAWLEY	0	DAWLEY	0	CLUN	1



A comparison of the population, trading function, and transport function for each Shropshire town.

Three sets of data were created for each Shropshire town or market-centre, for six different periods:

- 1) The population of each town's trading hinterland.
- 2) The trading functional index (FI) for each town.
- 3) The transport functional index (FI) for each town.

The population of each town's hinterland was calculated for each of the six periods. However, because of lack of data for particular towns at particular periods (see page 363 above) the number of observations of trading functional indices and transport functional indices was variable.<sup>54</sup>

To assess the association between the three sets of data, two correlation analyses were undertaken for each period. The correlation of the trading function with population size indicated that there was a close relationship between them, the correlation coefficient being in excess of .963 for every period and all significant at .001. Figure 7.15 shows the scattergram for the 1840's and is a representative example of the scatter of observations. The one outlier to the right of the graph being the town of Shrewsbury, which was in a similar position in all periods.

<sup>54</sup> The number of observations which could be used in the analysis of each period was sixteen in 1820's to 1830's, eighteen in 1840's to 1860's and nineteen in the 1870's.



Figure 7.15

Scattergram between trading functional index and town population size, 1840's.

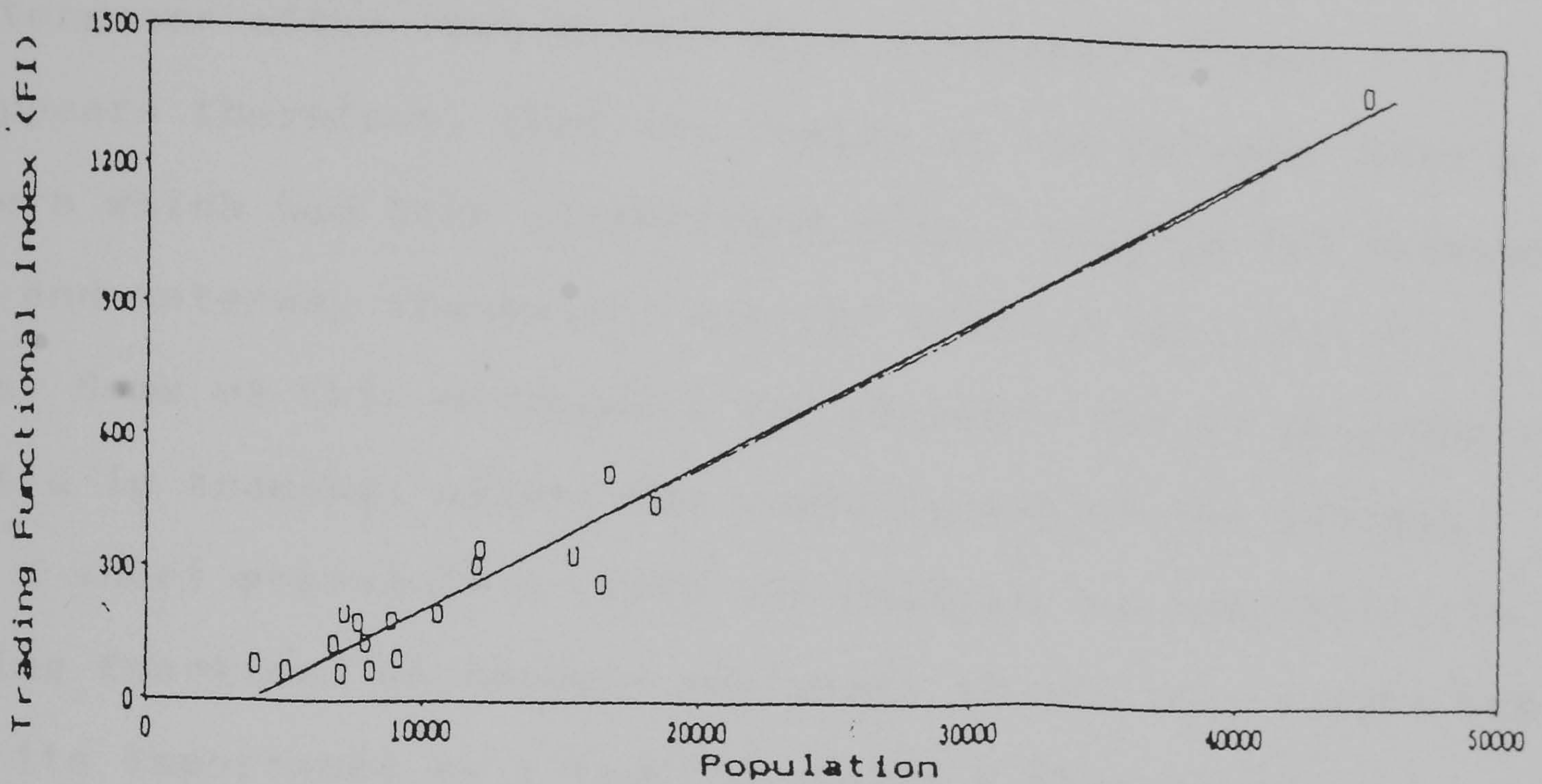
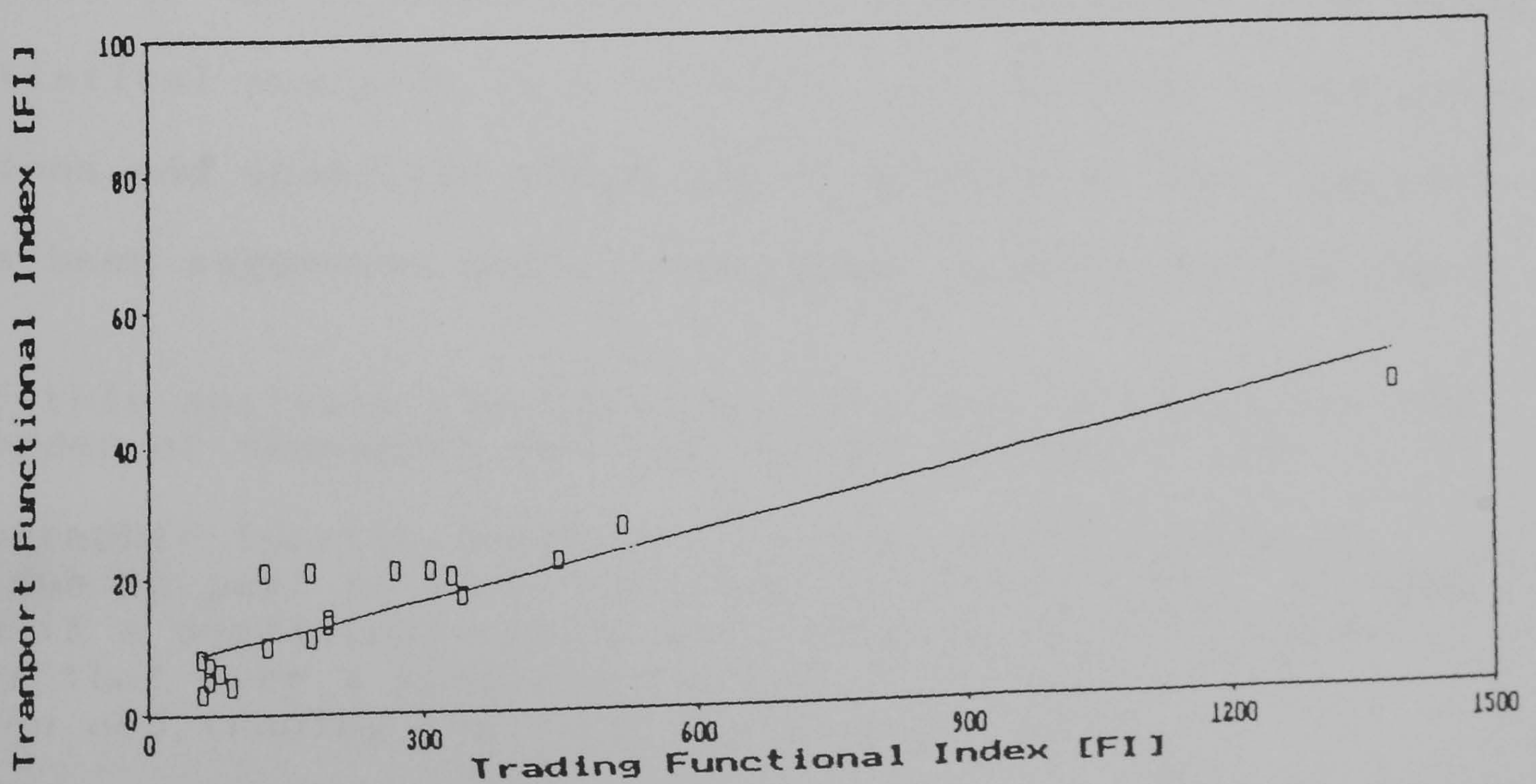


Figure 7.16

Scattergram between transport functional index and trading functional index, 1840's.





Having established a close correlation between trading function and population size, a further correlation of transport function with trading function was undertaken.<sup>55</sup> Although the correlation coefficients were still very high, all over .930 and their significance over .001 the scattergrams after 1840 become more divergent (Figure 7.17). It appears therefore, that the coming of the railway upset a pattern which had been established over a long period between road and waterway transport, and the trading function of towns. Some of this divergence was probably due to geographic inertia in trading, against the rapid spread of the railway over a short period.<sup>56</sup> As with the analysis of population to trading function, Shrewsbury was again an outlier, suggesting that its importance as a trading centre with a large population threshold was being matched by its role as a centre of transport.

Bridgnorth however, as Table 7.12 indicates, declined in rank order in transport terms, but as is shown in Table 7.11 maintained a comparative high position in terms of trade. This may raise a question about the validity of statistical analysis, or the methods used. It is argued however that using a statistical analysis is a valuable tool because it indicates questions and anomalies which can be studied by the historian. As has been suggested above, geographic inertia and the rapid

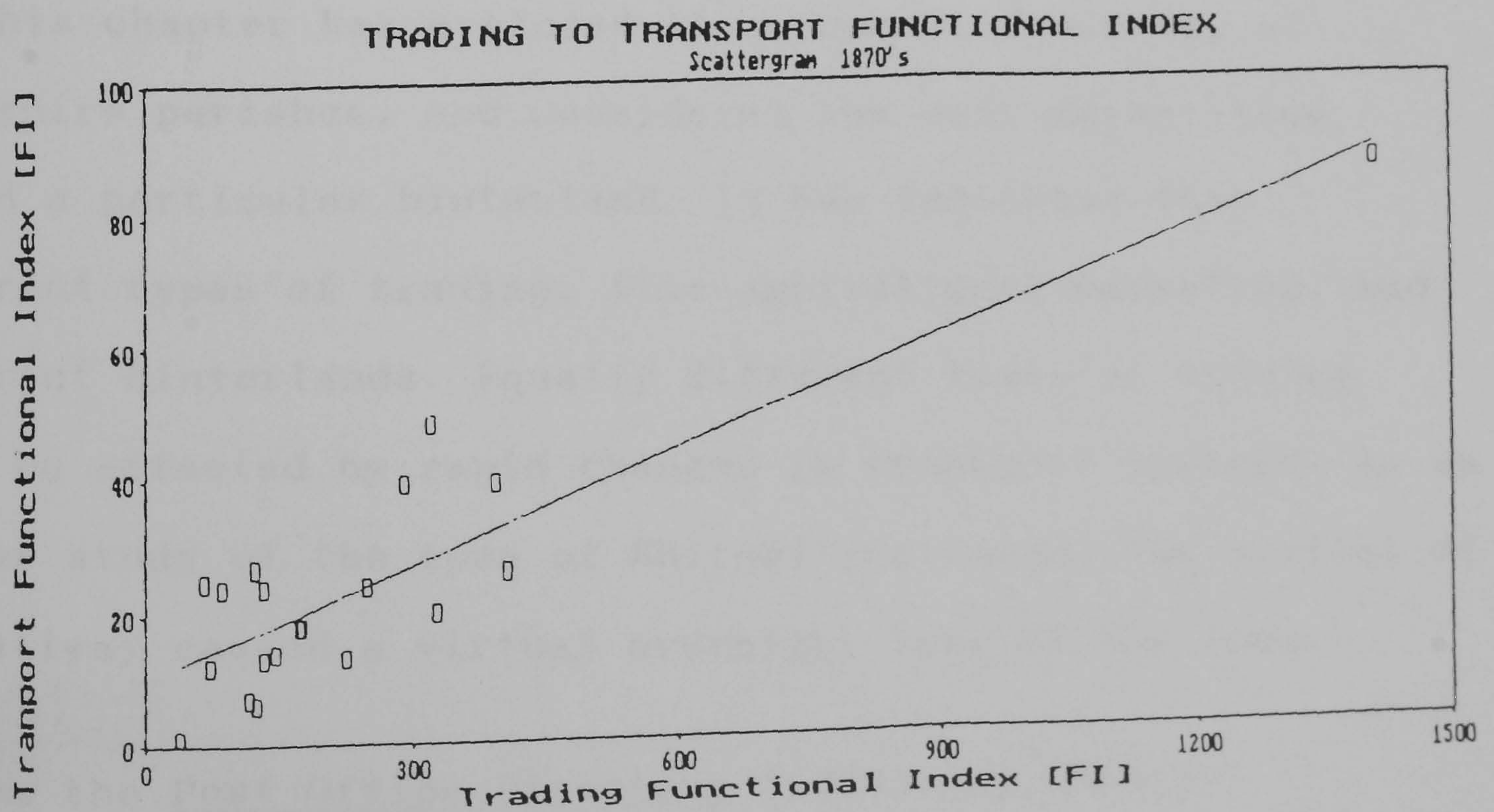
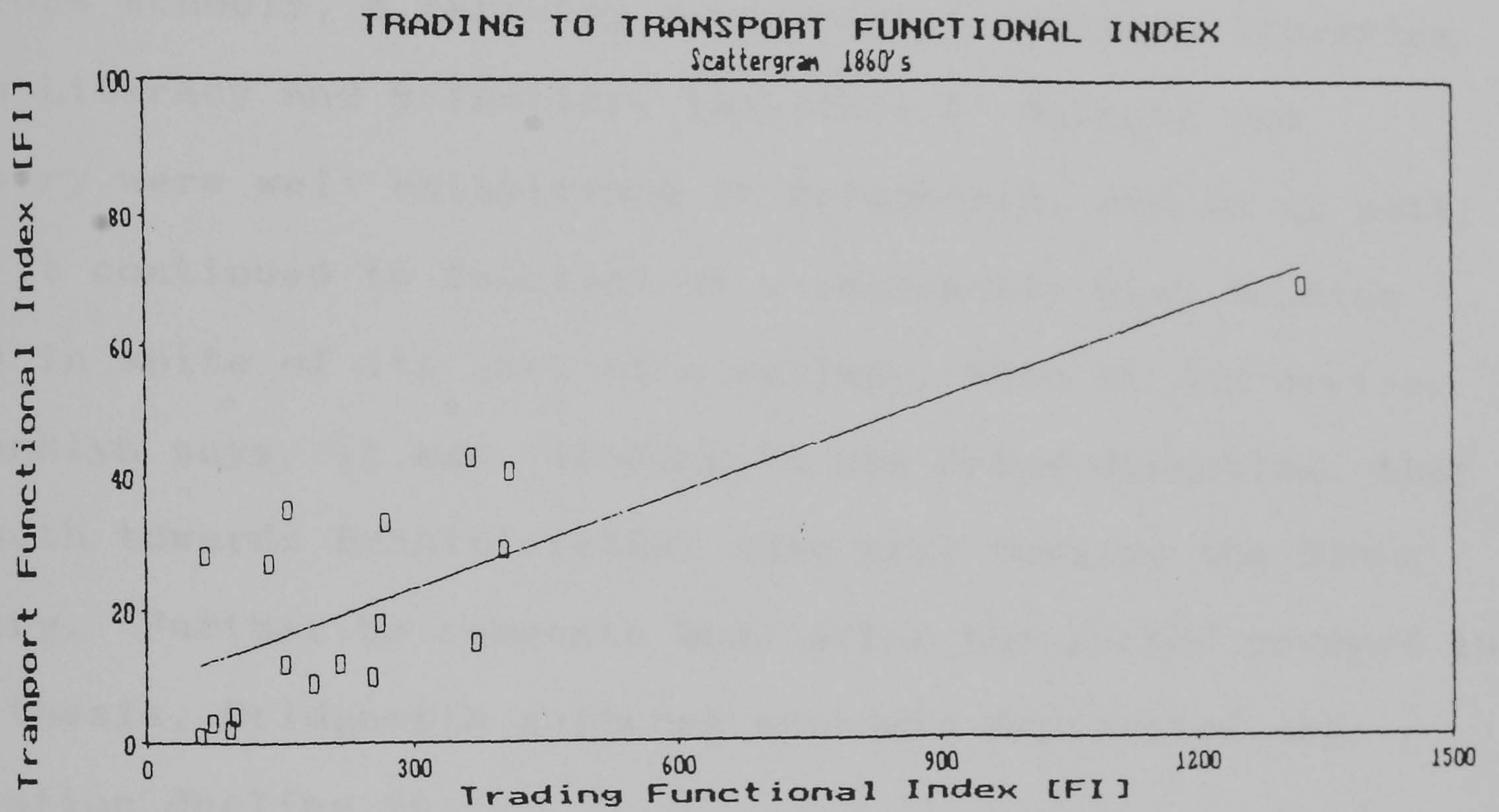
<sup>55</sup> For this analysis the technique used was to correlate the rank order of transport function using Spearman's Rho.

<sup>56</sup> Geographic inertia refers to a delay in the change of trade due in part to those who have invested capital waiting to see if a declining economy will recover. It is probable however that over a longer period of time the transport function and trading function would again converge.



Figure 7.17

Scattergrams between transport functional index and trading functional index, 1860's and 1870's showing indications of divergence.





deployment of the railway does appear to upset the correlation between transport and trade functional indices, and as has been stated on page 368 above, the railway came very late to Bridgnorth. In the 1860's this state of affairs did not appear to have affected the town's function as a trading centre. Bridgnorth was an important town, a parliamentary borough, an administrative centre, the head of a Poor Law Union, had numerous schools, a thriving agricultural society, libraries and a Literary and Scientific Institute.<sup>57</sup> Markets and industry were well established in Bridgnorth, and so up until 1870 it continued to function at a reasonably high trading level in spite of its lack of a railway. When it did arrive, as Wanklyn says, it was 'leading in the wrong direction, that is south towards Bristol rather than east towards the Black Country. Further he comments how, after the period covered in this thesis, Bridgnorth suffered economic depression and population decline.<sup>58</sup>

### The Shropshire towns in the nineteenth century - a conclusion

This chapter has explored the economic diversity of Shropshire parishes, and considered how each market town served a particular hinterland. It has indicated that different types of trading, like agricultural marketing, had different hinterlands. Equally different types of trading could be affected by rapid changes in transport systems. As an earlier study of the town of Shifnal indicated, the arrival of the railway caused a virtual overnight loss of the long-

<sup>57</sup> From the Post Office Directory (1863), pp. 655-6.

<sup>58</sup> M. Wanklyn, 'Bridgnorth and the river trade, 1660-1800.' Midland History, vol XVIII, (1993), p. 59.



distance carrier and coach-trade and this affected the inn-keeping trade and those involved in saddlery etc.<sup>59</sup> However, some traders responded to the availability of a wider market for their products by developing new lines which could be marketed via the railway.<sup>60</sup>

Within the county, the development of industrial and commercial sites in towns and villages in the nineteenth century has been studied. It has been demonstrated, that industry was more widespread across the county than may be assumed from today's concentration of interest in the World Heritage Site at Ironbridge.

By use of a well tried statistical method, the trading function of each parish in the 1851 and 1871 was calculated. Using this method and by consideration of Christaller's 'central place theory' it was shown how certain villages in the landscape had acted as central places where an apparent void existed between town hinterlands.

The same statistical method was used to explore the relationship of the trading function and population of each town's hinterland. The result for each period was a close correlation. Because no satisfactory statistical method was discovered which could be used to measure a town's transport

<sup>59</sup> T. G. Hill, 'The trading community of Shifnal (1988-9).

<sup>60</sup> One example is the William's family of Aston St, Shifnal who were wheelwrights and who developed a market for small hand barrows as used by municipal road-sweepers etc. From a personal conversation with the late John Williams when collecting photographs for a book on Shifnal. He told me how these small carts were sent by his father over all the country by rail from the nearby station. Photographs of some of these carts can be seen in S. Watts, Shifnal a Pictorial History (1989), plate nos 81, 82 and 83.



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function one had to be devised. A simple method was promulgated which would cope with the three types of transport, roads, waterways and railways. When completed the results of each town's transport function were correlated to the town's trading function. Although there was a relative correlation between transport systems and the trading function over all periods the scattergrams showed some divergence after the 1840's. This raised historical questions about the cause, and it was concluded that the inertia of trading function in town was a factor in a scenario where there was a rapid change in a transport systems over a relatively short period.



## CHAPTER 8

### FROM PACKHORSE TO RAILWAY - CONCLUSION.

In this thesis I have taken a 'network' approach to the study of transport systems. Although in chapter seven some reference has been made to the conveyance of passengers, it has concentrated primarily upon the development of transport systems which carried goods; road-carriers, inland-waterway barges, coastal vessels, tramways and railways. In economic terms, the transfer of goods from one place to another was much more important than the transfer of people, especially as there is firm evidence of the growth of specialized areas of production in agriculture and industry. The period of study, the seventeenth to the nineteenth centuries, was chosen because during this time a growing body of data from trade directories and other sources give detailed information on transport systems, their destinations and routes.

The part of Britain chosen for this study has as its a core area, the county of Shropshire, but it was realized at an early stage that a county is a man-made construct and is too limiting when a study of transport is being undertaken. For example, the areas of specialized production were not constrained by county boundaries, and the growth of provincial towns as transport centres indicated the need for a wider horizon. Therefore a hinterland of the core area was created, and further, this wider area was then placed within the context of transport networks which were country-wide, having an outer shell, the coastal shipping network.

Transport by water is an area where some important work has been undertaken on particular systems, such as that



upon the port books covering the river Severn. Further much has been written about the growth of the canals. However, as was expressed at the First Waterways Conference in Manchester in 1997, there is a need for more academic studies of canals and it was stated that little of academic importance had been written on canals since the seminal work of Hadfield and his colleagues in the 1960's. Although this thesis is wider than a study of canals, it is hoped that it has shed some light upon how they developed as part of an integrated transport network.

This study was aided by the use of a computer. With over 17,000 data entries recorded over a range of up to thirty fields, there can be no doubt that a study on this scale would not have been possible without this form of technology. As has been discussed at various stages in the text, the computer analysis has enhanced the understanding of how transport networks evolved and how they were integrated together.

As chapter two indicates, there have been a number of studies on road transport, with important contributions by Hey, Gerhold, Turnbull and Chartres. These studies seriously challenged the concept that road transport was virtually non-existent in the seventeenth and eighteenth centuries. They have demonstrated, how on certain routes like Exeter and the west-country to London (Gerhold), and Manchester to London (Turnbull), or in areas like Derbyshire and south Yorkshire (Hey), important networks were served by carriers, initially using pack-horses and later using waggons. This thesis has added another area of the country, primarily the area now called the West Midlands, to this body of research. It has suggested that the network in this area was in place by the



seventeenth century, and has considered that it may have had its origins in the Middle Ages. By undertaking the study of road transport systems under the parameters of 'national', 'middling', and 'local' carriers this chapter has joined the debate about the growth of carrier services during the eighteenth century. It has suggested that scholars have been measuring a growth in recording, rather than a growth in carrier services, although it is logical to assume, that if the economic life of the country was expanding, that there was a growth in both. For example, the research for this thesis has shown, that whilst the trade directories initially only recorded long-distance routes by 'national' carriers, by the mid-eighteenth century some details of 'middling' carriers were being added. However, other evidence, such as probate inventories and Badger's licences, suggest the existence of 'local' carriers at periods when they were not mentioned in trade directories.

In chapter three the growth and development of waterway systems serving the 'Shropshire Area' was explored. This indicated that three river systems provided outlets for the area. While some road-carrier routes provided links with the Trent and the Mersey, scholars such as Wakelin and Wanklyn have shown that the Severn played a major part in provision of water-borne transport from this area to Bristol and beyond. This chapter has shown how the development of the canal network initially linked these three river systems, and then made connections to growing mining and industrial areas. Using the development of the Ellesmere Canal as an example, it has shown how this canal linked the Ruabon coalfield and the



mineral deposits on the Shropshire-Montgomeryshire border with the Mersey; provided a route-way for lime to the agricultural communities through which it passed; and became an important link between some Shropshire towns and a wider area of supply and demand.

By extracting data from a selection of late eighteenth-century Port Books for Gloucester and Bristol, and combining it with data from the Universal British Directory of the 1790's, chapter four explores the network of coastal shipping. This chapter demonstrates the importance of this outer shell of transport, which provided for the movement of goods and raw materials that were being delivered by road or inland-waterway systems to coastal ports. This has therefore added another dimension to the work of Wakelin and Wanklyn on the Severn, and demonstrates how the specialist areas of production that were using that river, such as the iron-working areas of Shropshire and the Black Country, were linked with major ports involved in international trade. It also demonstrates how other areas of specialization, such as tin mining and china-clay extraction in Cornwall; cotton manufacture in Lancashire; grain production in East-Anglia; and the Yorkshire woollen trade were linked together by an integrated transport system.

In chapter five, the concept of the development of an integrated transport system was explored further. This demonstrated how, in the nineteenth century, many of the 'national' carriers combined their road networks with waterway systems, and using Birmingham, Worcester, and Shrewsbury, as examples, it showed how carrier-owned warehousing had



developed, together with wharfage on rivers or canals. The theme of the continuity of road-carrying firms was explored against a changing background of systems and technology, including the final developments of the canal system and the emergence of railways.

The theme of nineteenth-century change is considered further in chapter six. It explores how initially tramways were developed in the 'Shropshire Area' to serve mining and industrial premises linking them to river or canal systems. It considers how new main-line canals, such as the Birmingham and Liverpool Junction Canal, were built, and how these provided a service to market towns in the core area of Shropshire. It explores how the railway developed, and demonstrates how lines were initially concentrated in the east of the area and centred on Birmingham. That the development of lines spread gradually westwards and how some Shropshire towns, like Bridgnorth, did not get a railway before the 1860's. It also shows how some towns were linked by main-line railways, such as the line from London via Birmingham and Shrewsbury to Chester, while others were merely served by a branch line, and a few, like Clun, never had a railway.

Finally, in chapter seven the effect of changing transport systems and networks in the nineteenth century was explored by reference to the core area, the county of Shropshire. The towns, set within the hinterlands which they served, were studied using well tried statistical techniques. At various years between 1822 and 1870 a correlation was made between the towns' trading functions and the populations of their hinterland. The results showed a strong correlation between



the trading function and the population it served.

As no statistical measure had so far been devised which could measure the varied transport function of towns, it was necessary to devise one. This was then used to study the relationship between a town's trading function and the sum of the transport systems that served it. Although the result was not as convincing as the correlation between trading function and population, it raised some challenging anomalies. These suggested that the build-up of transport networks over a long period, such as the development of road and waterway transport systems, had up to the 1840's matched the trading function of a town, but that the rapid deployment of the railway over the next twenty years upset this correlation. It is possible that over a longer period a stronger correlation would again emerge.

Overall this thesis has considered a wide area of research which is in line with comments by Phythian-Adams in his book Re-thinking English Local History such as:

'This discussion has arisen out of two problems that appear to face English local historians; how they may relate their detailed findings systematically to the wider mosaic of English society as a past whole; and how, in doing so, they need to discover ways in which to overcome some of the limitations posed by many of their conventional objects of local enquiry.'<sup>1</sup>

The local historian who chooses transport as a topic is forced into considering wider horizons. However, in attempting to relate the particular to the general, the researcher is faced with a complex range of interacting economic, cultural

<sup>1</sup> C. Phythian-Adams, Re-thinking English Local History (1987), pp. 42 - 49.



and social factors which defy simplistic answers or lead to rash generalizations. In the discipline of physics the traditional laws of Newton, on which so much of our understanding of the universe is based, are gradually being questioned. A 'New Physics' is emerging which is grounded upon a more holistic view of the universe. Perhaps local historians too should develop an holistic view and I hope therefore that my approach to the study of networks, wider linkages and inter-regional repercussions, is seen as one small step in that direction.



USING TRADE DIRECTORIES AS A SOURCE

APPENDIX 1

Trade Directories have been used extensively as a primary source in this thesis. Their value as a source has been recognized by historians and historical geographers, for example Pryce says:

'But for community historians with their specific research focusing on place and locality, town or county directories are of prime importance... Moreover, they offer considerable scope for writing community histories - especially in aggregated studies of local occupational structures. Directories may turn out to be the only means of finding out, virtually for any town, large or small, details as to market functions, the sphere of influence that a specific centre had carved out from the surrounding areas, or for tracing developments over time.<sup>1</sup>

However, Pryce also indicates that directories should be approached with caution, and a number of other scholars have also warned about the pitfalls that exist. Pryce says:

'A series of trade directories can yield valuable insights as to the changes occurring in specific towns during the nineteenth and twentieth centuries - for example, the rise and fall of different industries or types of employment, or changing function of towns. But rigorous techniques and consistent standards have to be applied to their analysis.'<sup>2</sup>

One of the problems associated with Directory publishing was the temptation of 'piracy' of information. Shaw and Tipper have indicated that this is a probability in the 1790's; saying of Barfoot and Wilkes:

'There is strong evidence, however, to suggest that the publishers of the Universal British Directory cut corners by pirating previously publishes directories.'<sup>3</sup>

In Shropshire, the only directory from which Barfoot and

<sup>1</sup> W. T. R. Pryce 'Directories' in M. Drake and R Finnegan, Sources and Methods for Family and Community Historians: A Handbook (1994) p. 58.

<sup>2</sup> Pryce 'Directories' p. 60.

<sup>3</sup> G. Shaw and A. Tipper, British Directories (1988), p.8.



Wilkes could have pirated information was Minshull's Shrewsbury Guide and Directory (1793). There is no evidence to suggest they did, in fact Minshull's directory contains more information than the Universal British entry for the town of Shrewsbury. It is appears that those who collected the material for the Shropshire town of Wellington did not visit it, as they listed no names of traders and merely said 'Here is no manufactory, the inhabitants being chiefly employed in getting coal, lime and iron-stone. There are two furnaces, worked by a steam engine, one of the largest in England.'<sup>4</sup>

Norton, who has studied, in particular eighteenth century directories, warns about their unreliability when she says:

'... we may now turn to some points about their authorship and compilation which affect their reliability as sources of information. It would be misleading to regard them as either precise or accurate.'<sup>5</sup>

She then describes how various publishers in the 19th century attempted to overcome the problem associated with piracy. Generally speaking this resulted in the use of professional directory agents to collect the basic data, and certain cross checks by the publisher to check the information received. For example Norton says:

'Agents paid for the job were said to be more reliable than those paid a commission on sales... The assistance of persons with other qualifications was also made use of...

It is realized therefore, that the Trade Directory needs handling with caution, and if possible checks on its entries should be undertaken. In this thesis, it was hoped to cross-

<sup>4</sup> Barfoot & Wilkes, Universal British Directory (1792-1798), Appendix, p. 238.

<sup>5</sup> J. E. Norton, Guide to National and Provincial Directories published before 1856 (1950), p. 16.



check some late eighteenth-century directory entries for road carriers to newspaper adverts, but so few were found, and those that were found only related to a very limited number of carrier firms that this form of cross-check was abandoned in favour of the more effective cross-checks made possible by using an extensive computer database.

In the conclusion to his thesis on the Gloucester Port Books Wakelin says:

'New insights have been made possible, as a result of computerisation of coastal Port Books, into the nature and role of internal trade in the economy.'<sup>6</sup>

His research has demonstrated that by constructing and using an extensive computer database, it is possible to undertake historical research with a high degree of confidence which would not be possible using manual methods. In this thesis the computer has been used in a similar way for the analysis of road carrying networks, and for the analysis of the status of Shropshire towns. Road carriers are listed in Trade Directories with either their destination or the towns they served. To look at one town's entries in isolation could raise queries about the accuracy of the data. However, by building a computer database that covered a wide geographic area, and drawing upon the data contained in an extensive number of trade directories, 101 were used overall, it was possible in many cases to check one towns entry against another. This helped to confirm the existence of a particular carrier's route, and build up a comprehensive picture of carrier networks. In the 19th century trade directory entries were

<sup>6</sup> A. P. Wakelin, 'Pre-industrial trade on the river Severn: a computer-aided study of the Gloucester port books c 1640 - c 1770, unpublished PhD thesis, Wolverhampton Polytechnic (1991), p. 255.



subject to a number of checks and balances applied to the entries by the publisher such the methods used by Pigot and Slater. These coupled to the checks made possible by cross-checking on the computer means that a high degree of confidence can be expressed for the analysis for this period. However, the data for the eighteenth century and earlier could not always be checked by these methods because of the limited number of Trade Directories, therefore any results for the earlier period need to be viewed with the caveat that a high confidence level is impossible.

For the initial analysis of the trading function of Shropshire towns, two directories, Bagshaw's and Cassey's, were used for the comparison of towns and villages in 1851 and 1871. For a further analysis, in the decennial periods from the 1820's to the 1870's, Pigot's and Slater's directories were used as far as possible in order to have confidence in the results. Pigot's directories were available for the years 1822, 1835 and 1842, the latter being cross-checked to Robson's directory of 1840. The continuation of Pigot's directories under the name Slater were used for 1850, (against which Bagshaw's directory of 1851 was a cross-check), 1856, and 1868 (against which Kelly's Post Office Directory of 1870 was a cross-check).

It is known that the data contained in the Pigot/Slater directories was subject to rigorous standards, although they too experienced difficulties in some places in collecting data. In previous research, using the nineteenth-century directories for particular Shropshire towns it has been



possible to cross-check the trade directory listings and occupations against the census, the rating lists and the tithe apportionment schedule. For example in the study of Shifnal in the period 1841-1861 data on traders was extracted from directories covering the period 1822 - 1868 and it was discovered that Pigot's and Slater's directories were apparently very accurate.<sup>6</sup>

<sup>6</sup> University of Leicester: T. G. Hill, 'The trading community of Shifnal and its geographical and genealogical linkages; a case study, 1841-1861.' unpub. M.A. Dissertation, University of Leicester, Department of English Local History, (1988-89). Also some unpublished studies using the same techniques on the towns of Much Wenlock and Church Stretton have been used as a basis for teaching classes for The Department of Continuing Studies, University of Birmingham.



Robert Bather/Batho	=	Jane Phillips
Adcott Hall later of Prescottt (Yeoman)	:	bur 17 Apr 1717
(In 1713 took a freehold estate in Stanton-upon-Hine Heath	:	
d 1726/7	:	m 2 Mar 1692/3
Great Ness	:	St Alkmunds, Shrewsbury

Edward	:	William	:	Jane	:	Mary	:	Joseph	:	Benjamin
b c 1693	:	bp 14 Jul 1695	:	will 1768	:	bp 30 Sep 1699	:	bp 18 Oct 1700	:	bp 6 Sep 1702
d 9 Jun 1766	:	Little Ness	:	proved 1773	:	Little Ness	:	Little Ness	:	Little Ness
age 73	:	of Adcott later	:		:	m Wm Gittins of	:	of Montford	:	
bur Great Ness	:	Montford	:		:	Baschurch	:		:	
:	:	:	:	:	:	23 May 1719	:		:	
:	:	:	:	:	:	St Chads	:		:	

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Edward Bather	=	Katherine Edwards (dau of John Edwards of Montford)
b c 1693 ?	:	b c 1693
of Walford	:	
d 9 Jun 1766 ? a 73	:	bur 9 Dec 1773 age 80
bur Gt Ness	:	Gt Ness
will 27 May 1766	:	[will 1766]
probate 23 May 1771	:	
	:	m 21 Mar 1715/16
	:	St Alkmunds, Shrewsbury

Edward	:	William	:	Ann	:	Jane	:	Robert	:	Elizabeth	:	Edward
bp 7 Dec 1717	:	b 14 Feb 1719/20	:	bp 18 Oct 1723	:	b c 1724	:	bp 11 Aug 1734	:	bp 4 Oct 1737	:	bp 5 Dec 1739
Little Ness	:	Little Ness	:	Little Ness	:	m John Norton	:	Baschurch	:	Baschurch	:	Baschurch
bur 31 Jan 1736	:	Walford	:	m John Cook	:	8 Feb 1749/50	:	m John Brayne	:	d 13 Sep 1768	:	at sea in 1766
(sp)	:	[will 1766]	:	[will 1766]	:	St Mary's,	:	bur 1754	:	bur 19 Sep 1768	:	[will 1766]
	:		:		:	Shrewsbury	:	bur 1814 St Alkmund	:		:	
	:		:		:	[will 1766]	:	Shrewsbury	:	[will 1766]	:	
	:		:		:		:	[will 1766]	:		:	

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John Bather	=	Elizabeth Hawkesford
bp 30 Jun 1726	;	b c 1733
Little Ness	;	bur 6 Apr 1785 age 52
d 31 Jan 1810 age 83	;	Meole Brace
bur 5 Feb 1810	;	
Meole Brace	;	
[Carrier]	m 1 Jan 1750	
[Esq]	St Julians, Shrewsbury	
purchased Manor of	;	
Meole Brace 1779	;	

Elizabeth Hawkesford  
b c 1733  
bur 6 Apr 1785 age 52  
Neole Brace

John Bather	=	Martha Hannah Halifax
bp 23 Oct 1751 St Chads, Shrewsbury	:	b 2 Sep 1757
Meole Brace	:	d 30 Aug 1824
d 26 Oct 1796 bur 1 Nov 1796	:	bur 1 Sep 1824
Meole Brace	:	Meole Brace
{MA, Ch Ch, Oxon}	m	?
{vicar of Meole Brace 1778-1796}	:	
{burgess of Shrewsbury 5 May 1780}	:	
{will 1766}	:	

Martha Hannah Halifax  
b 2 Sep 1757  
d 30 Aug 1824  
bur 1 Sep 1824  
Meole Brace  
?

Edward Bather  
bp 2 Apr 1780 Meole Brace  
d 3 Oct bur 8 Oct 1847

John Bather	Martha Bather
bp 30 Sep 1781	bp 16 Jan 1783
d 8 Nov 1839	bur 5 Apr 1823

## Notes re Bather Family

Ref from Jo Morris Pedigree - John Bather 1726-1818 - London Carrier/Gent of Shrewsbury.

"Previous to the introduction of Canals or Coaches, Mr John Bather was then the great carrier by Waggon's from Shrewsbury to London and from London to Shrewsbury, in which business, by his great industry and integrity he accumulated a considerable fortune. When the Advowson of Meole and other estates were sold by the Viscountess Malpas (dr and heir of Sir Francis Edwards, Bart). Mr Bather purchased the advowson and their estates in the parish of Meole Brace and died there, highly respected, 31st January 1818 aged 84. (He was baptised, Little Ness 30 June 1826)."

Ref Bailey's Western and Midland Directory (1783) - Bather & Powell, London Carriers, Shrewsbury.

(will 1775) indicates a mention in the will of Benjamin Bather 14 Oct 1775 (Lichfield Joint Record Office).

[will 1766] indicates a mention in the will of Edward Bather 27 May 1766, proved 23 May 1771 (Lichfield Joint Record Office).

(will 1779] indicates a mention in the will of Martha Bather 23 Apr 1779 (Lichfield Joint Record Office).

{will 1794} indicates a mention in the will of Benjamin Bather 14 Mar 1794 (Lichfield Joint Record Office).



William Hawkesford	=	Mary Bott
	:	
	:	
	m 4 May 1679	
	Lichfield Cathedral	
	:	
	:	
	:	
	.....	
	:	
	:	
Richard Hawkesford	=	Margaret or Mary Sturney
b c	:	
		[George Hayes]
		[Will 24 Sep 1764]

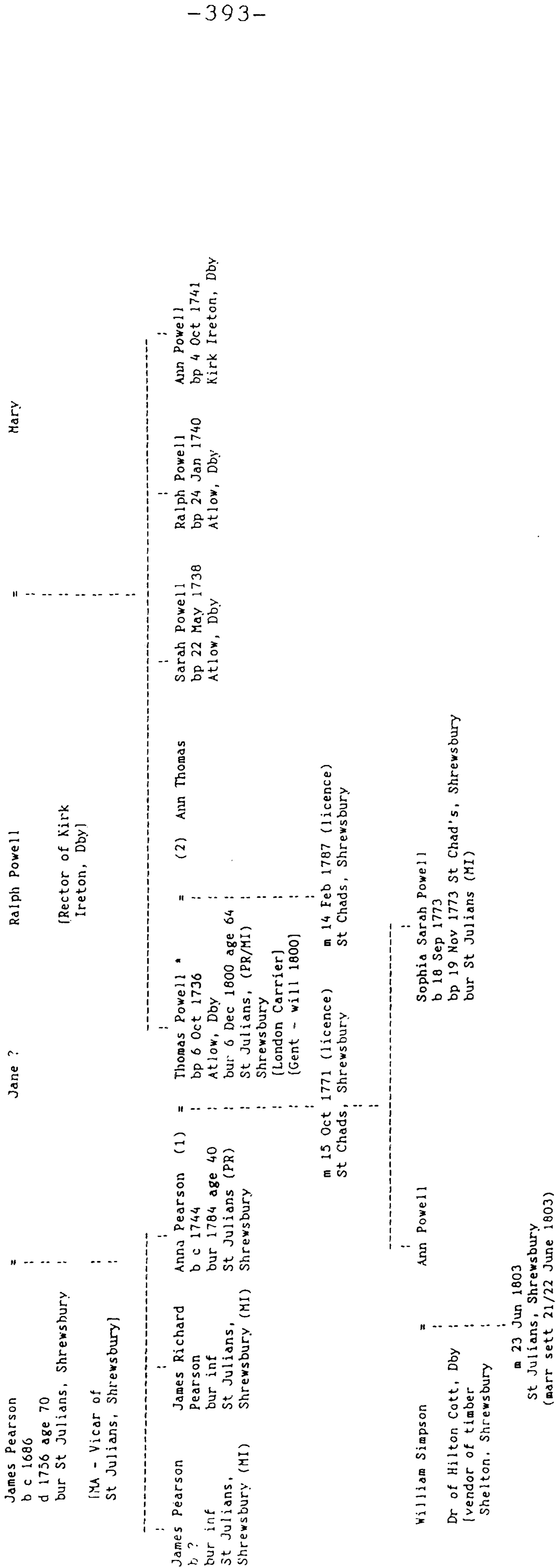
[illegible]

## Notes re Hawkesford Family

A scan of the will index 1751 - 1800 suggests that the Hawkesford family are concentrated in Warwickshire. In particular Coleshill, Nether Whitacre and Birmingham. A family of Hawkesford settle in Bilston in Staffordshire and there are rough notes on a family tree held in The William Salt Library, Stafford. It is suggested that this family were also involved in the carrying trade. Dovey Hawkesford married 1722 died 174 was a chapman. In 1822 a Joseph Hawkesford ran a cart from Bilston to Wolverhampton which was continued in 1835 by a William Hawkesford. (Pigot's Directories) [will 1764] indicates a mention in the will of George Hayes will 24 Sep 1764



THE PEARSON-POWELL FAMILY TREE



Notes re Powell Family

Bailey's Western and Midland Directory 1783 - Bather & Powell, London Carriers, Shrewsbury.  
Lowdnes' London Directory 1786 - Powell, London Carrier, Castle and Falcon, Aldersgate Street.  
Universal British Directory, London 1793 - Castle & Falcon, Aldersgate St, Shrewsbury Waggon, Monday a 3 morning  
[The goods to be brought on Saturday morning] by Powell. Wolverhampton Waggon, Thursday noon. T Powell & Co.  
Salopian Journal Wednesday 3 Dec 1800 - Report of "Death of Mr Powell of Belmont on Sunday last" (30 Nov).  
St Julians Parish Register - Burial Thomas Powell, 6 Dec 1800.  
MI, St Julians, Shrewsbury - Thomas Powell son of Rev Ralph Powell, late rector of Kirk Ireton, Co Derby, 1800 aged 64.  
Will - Dated 18 Oct 1800, Proved 2 Jan 1801, - Thomas Powell of Shrewsbury, Gent, property at Shelton left to Ann his daughter.



RIVER IMPROVEMENT AND CANAL OPENING DATES SHOWING  
THE TOWNS SERVED AND CONNECTION TO OTHER SYSTEMS.

RIVER/CANAL NAME	YEAR	TOWN/PORT	CONNECTION TO
AIRE & CALDER	1704	CASTLEFORD	COAST - HUMBER
AIRE & CALDER	1704	LEEDS	COAST - HUMBER
AIRE & CALDER	1704	WAKEFIELD	COAST - HUMBER
ANCHOLME	1763	BRIGG	COAST - HUMBER
ANDOVER CANAL	1794	ANDOVER	COAST - SOUTHAMPTON WATER
ANDOVER CANAL	1794	ROMSEY	COAST - SOUTHAMPTON WATER
ANDOVER CANAL	1794	STOCKBRIDGE	COAST - SOUTHAMPTON WATER
ARUN (SUSSEX)	1790	ARUNDEL	COAST
ARUN (SUSSEX)	1790	PETWORTH	COAST
AVON (BRISTOL)	1727	BATH	COAST
AVON (BRISTOL)	1727	BRISTOL	COAST
AVON (HANTS)	1684	CHRISTCHURCH	COAST
AVON (HANTS)	1684	RINGWOOD	COAST
AVON (HANTS)	1684	SALISBURY	COAST
AVON (WARKS)	1639	EVESHAM	RIVER SEVERN
AVON (WARKS)	1639	PERSHORE	RIVER - SEVERN
AVON (WARKS)	1639	STRATFORD ON AVON	RIVER SEVERN
BASINGSTOKE CANAL	1794	BASINGSTOKE	RIVER - WEY/THAMES
BASINGSTOKE CANAL	1794	FARNBOROUGH/ALDERSHOT	RIVER - WEY/THAMES
BASINGSTOKE CANAL	1794	ODIHAM	RIVER - WEY/THAMES
BEVERLEY BECK	1731	BEVERLEY	COAST - HUMBER
BIRMINGHAM CANAL	1772	BIRMINGHAM	CANAL - STAFFS & WORCS (ALDERSLEY)
BIRMINGHAM CANAL	1789	BIRMINGHAM	CANAL - BIRMINGHAM & FAZELEY
BIRMINGHAM CANAL	1769	WEDNESBURY	CANAL - STAFFS & WORCS (ALDERSLEY)
BIRMINGHAM CANAL	1772	WOLVERHAMPTON	CANAL - STAFFS & WORCS (ALDERSLEY)
BLTYHE	1761	HALESWORTH	COAST
BOURNE EAU	1781	BOURNE	RIVER GLEN - WELLAND
BRADFORD CANAL	1774	BRADFORD	CANAL - LEEDS & LIVERPOOL
BRADFORD CANAL	1774	SHIPLEY	CANAL - LEEDS & LIVERPOOL
BRIDGEWATER CANAL	1773	PRESTON BROOK	COAST - MERSEY ESTUARY
BRIDGEWATER CANAL	1765	SALFORD	RIVER MERSEY/IRWELL
BRIDGEWATER CANAL	1765	WORSLEY	RIVER MERSEY/IRWELL
BURE	1779	AYLSHAM	COAST
CALDER & HEBBLE	1770	SOWERBY BRIDGE	COAST - HUMBER
CALDER & HEBBLE	1770	WAKEFIELD	COAST - HUMBER
CAM	1702	CAMBRIDGE	RIVER OUSE GREAT
CHELMER	1797	CHELMSFORD	COAST
CHESTERFIELD CANAL	1777	CHESTERFIELD	RIVER - TRENT
CHESTERFIELD CANAL	1777	EAST RETFORD	RIVER - TRENT
CHESTERFIELD CANAL	1777	STOCKWITH	RIVER - TRENT
CHESTERFIELD CANAL	1777	WORKSOP	RIVER - TRENT
COLNE	1623	COLCHESTER	COAST
COVENTRY CANAL	1790	ATHERSTONE	CANAL - TRENT & MERSEY
COVENTRY CANAL	1790	COVENTRY	CANAL - TRENT & MERSEY
COVENTRY CANAL	1790	NUNEATON	CANAL - TRENT & MERSEY
COVENTRY CANAL	1790	TANWORTH	CANAL - TRENT & MERSEY
DART	0	DARTMOUTH	COAST
DART	0	TOTNES	COAST
DERBY CANAL	1796	DERBY	CANAL - TRENT & MERSEY
DERWENT	1721	DERBY	RIVER - TRENT
DON	1751	DONCASTER	COAST - HUMBER



APPENDIX 3 Page 2.

RIVER IMPROVEMENT AND CANAL OPENING DATES SHOWING  
THE TOWNS SERVED AND CONNECTION TO OTHER SYSTEMS.

RIVER/CANAL NAME	YEAR	TOWN/PORT	CONNECTION TO
DON	1780	ROTHERHAM	COAST - HUMBER
DOUGLAS	1742	RUFFORD	CANAL LEEDS & LIVERPOOL 117811
DOUGLAS	1742	WIGAN	COAST - RIBBLE ESTUARY
DRIFFIELD	1776	DRIFFIELD GT	COAST - HUMBER
DROITWICH CANAL	1771	DROITWICH	RIVER - SEVERN
DUDLEY CANAL	1779	BLACK DELPH	CANAL -STOURBRIDGE
DUDLEY CANAL	1792	DUDLEY	CANAL -STOURBRIDGE
EXETER CANAL	1566	EXETER	COAST
FORTY FOOT RIVER CANAL	1651	CHATTERIS	RIVER GREAT OUSE/COAST - WASH
FORTY FOOT RIVER CANAL	1651	RAMSEY	RIVER NENE/GT OUSE
GIPPING	1793	IPSWICH	COAST
GIPPING	1793	STOWMARKET	COAST
GRANTHAM CANAL	1797	GRANTHAM	RIVER - TRENT
IDLE	0	BAWTRY	RIVER - TRENT
ITCHEN	1710	*WINCHESTER	COAST
IVEL	1758	BIGGLESWADE	RIVER - GREAT OUSE
KENNET	1723	NEWBURY	RIVER - THAMES
KINGS DYKE CANAL	0	WHITTLESEY	RIVER - GREAT OUSE
LARK	1720	BURY ST EDMUNDS	RIVER - OUSE GREAT
LEE	0	HERTFORD	RIVER - THAMES
LEE	0	WARE	RIVER - THAMES
LEICESTER CANAL	1794	LEICESTER	RIVER - SOAR (LOUGHBOROUGH)
LOUTH CANAL	1770	LOUTH	COAST
MARKET WEIGHTON CANAL	1782	MARKET WEIGHTON	COAST - HUMBER
MEDWAY	1750	CHATHAM	COAST - THAMES ESTUARY
MEDWAY	1750	MAIDSTONE	COAST - THAMES ESTUARY
MEDWAY	1750	ROCHESTER	COAST - THAMES ESTUARY
MEDWAY	1750	TONBRIDGE	COAST - THAMES ESTUARY
MERSEY/IRWELL	1736	MANCHESTER	COAST - MERSEY ESTUARY
MERSEY/IRWELL	1736	WARRINGTON	COAST - MERSEY ESTUARY
NEATH	1750	NEATH	COAST
NENE	1761	NORTHAMPTON	COAST - WASH
NENE	1761	OUNDLE	COAST - WASH
NENE	1761	PETERBOROUGH	COAST - WASH
NENE	1761	THRAPSTON	COAST - WASH
NENE	1761	WELLINGBOROUGH	COAST - WASH
NENE	1761	WISBECH	COAST - WASH
NOTTINGHAM CANAL	1796	NOTTINGHAM	RIVER - TRENT
OLD NENE	1753	MARCH	RIVER NENE/GT OUSE
OLD NENE	1753	OUTWELL	RIVER NENE/GT OUSE
OUSE GREAT	1689	DOWNHAM MARKET	COAST
OUSE GREAT	1689	ELY	COAST - WASH VIA OLD BEDFORD RIVER
OUSE GREAT	1689	LITTLEPORT	COAST
OUSE GREAT/OLD BEDFORD	1637	BEDFORD	COAST - WASH VIA OLD BEDFORD RIVER
OUSE GREAT/OLD BEDFORD	1637	HUNTINGDON	COAST - WASH VIA OLD BEDFORD RIVER
OUSE GREAT/OLD BEDFORD	1637	KINGS LYNN	COAST - WASH VIA OLD BEDFORD RIVER
OUSE GREAT/OLD BEDFORD	1637	ST IVES	COAST - WASH VIA OLD BEDFORD RIVER
OUSE GREAT/OLD BEDFORD	1637	ST NEOTS	COAST - WASH VIA OLD BEDFORD RIVER
OUSE LITTLE	1677	THETFORD	RIVER - OUSE GREAT
OUSE (YORKS)	1769	SELEY	COAST - HUMBER
OUSE (YORKS)	1769	YORK	COAST - HUMBER



RIVER IMPROVEMENT AND CANAL OPENING DATES SHOWING  
THE TOWNS SERVED AND CONNECTION TO OTHER SYSTEMS.

RIVER/CANAL NAME	YEAR	TOWN/PORT	CONNECTION TO
OXFORD CANAL	1790	BANBURY	CANAL - COVENTRY/RIVER THAMES
OXFORD CANAL	1790	BRAUNSTON	CANAL - COVENTRY/RIVER THAMES
OXFORD CANAL	1790	OXFORD	CANAL - COVENTRY/RIVER THAMES
RODING	1764	RODING	RIVER - THAMES
ROTHER EASTERN	0	NEWENDEN	COAST
ROTHER EASTERN	0	RYE	COAST
ROTHER WESTERN	1794	MIDHURST	RIVER - ARUN (SUSSEX)
ROTHER WESTERN	1793	PETWORTH	RIVER - ARUN (SUSSEX)
SANKEY BROOK	1757	ST HELENS AREA	COAST - MERSEY ESTUARY
SEVERN	0	BEWDLEY	COAST - BRISTOL CHANNEL
SEVERN	0	BRIDGNORTH	COAST - BRISTOL CHANNEL
SEVERN	0	GLOUCESTER	COAST - BRISTOL CHANNEL
SEVERN	0	SHREWSBURY	COAST - BRISTOL CHANNEL
SEVERN	0	TEWKESBURY	COAST - BRISTOL CHANNEL
SEVERN	0	UPTON ON SEVERN	COAST - BRISTOL CHANNEL
SEVERN	0	WELSHPOOL	COAST - BRISTOL CHANNEL
SEVERN	0	WORCESTER	COAST - BRISTOL CHANNEL
SIR JOHN RAMSDENS CANAL	1776	HUDDERSFIELD	RIVER - CALDER/HEBELE
SLEA	1794	SLEAFORD	RIVER - WITHAM
SOAR	1778	LOUGHBOROUGH	RIVER - TRENT
SOHAM LODGE	1790	SOHAM	RIVER - GREAT OUSE
STAFFS & WORCS CANAL	1772	GREAT HAYWOOD	RIVER SEVERN - TRENT & MERSEY CANAL
STAFFS & WORCS CANAL	1772	KIDDERMINSTER	RIVER SEVERN - TRENT & MERSEY CANAL
STAFFS & WORCS CANAL	1772	PENKRIDGE	RIVER SEVERN - TRENT & MERSEY CANAL
STAFFS & WORCS CANAL	1772	STOURPORT	RIVER SEVERN - TRENT & MERSEY CANAL
STAFFS & WORCS CANAL	1772	WOLVERHAMPTON	RIVER SEVERN - TRENT & MERSEY CANAL
STORT	1769	BISHOPS STORTFORD	RIVER - LEE
STOUR (KENT)	1594	CANTERBURY	COAST
STOUR (KENT)	1594	SANDWICH	COAST
STOUR (SUFFOLK)	1709	DEDHAM	COAST - HARWICH
STOUR (SUFFOLK)	1709	MANNINGTREE	COAST - HARWICH
STOUR (SUFFOLK)	1709	SUDEBURY	COAST - HARWICH
STOUR (WOR)	1662	KIDDERMINSTER	RIVER SEVERN
STOUR (WOR)	1662	STOURBRIDGE	RIVER SEVERN
STOURBRIDGE CANAL	1779	STOURBRIDGE	CANAL STAFFS & WORCS - BLACK DELPH
STOVER CANAL	1792	TEIGNGRACE	RIVER - TEIGN
STROUDWATER CANAL	1779	STROUD	COAST - BRISTOL CHANNEL
THAMES	0	ABINGDON	COAST - THAMES ESTUARY
THAMES	0	CAVERSHAM	COAST - THAMES ESTUARY
THAMES	0	HENLEY	COAST - THAMES ESTUARY
THAMES	0	KINGSTON	COAST - THAMES ESTUARY
THAMES	0	LECHLADE	COAST - THAMES ESTUARY
THAMES	0	MAIDENHEAD	COAST - THAMES ESTUARY
THAMES	0	OXFORD	COAST - THAMES ESTUARY
THAMES	0	READING	COAST - THAMES ESTUARY
THAMES	0	RICHMOND	COAST - THAMES ESTUARY
THAMES	0	WALLINGFORD	COAST - THAMES ESTUARY
THAMES	0	WEYBRIDGE	COAST - THAMES ESTUARY
THAMES	0	WINSOR	COAST - THAMES ESTUARY
THAMES & SEVERN CANAL	1789	CIRENCESTER	RIVER - THAMES/COAST - BRISTOL CHANNEL
THAMES & SEVERN CANAL	1789	LECHLADE	RIVER - THAMES/COAST - BRISTOL CHANNEL



RIVER IMPROVEMENT AND CANAL OPENING DATES SHOWING  
THE TOWNS SERVED AND CONNECTION TO OTHER SYSTEMS.

RIVER/CANAL NAME	YEAR	TOWN/PORT	CONNECTION TO
THAMES & SEVERN CANAL	1789	STROUD	RIVER - THAMES/COAST - BRISTOL CHANNEL
TONE	1717	BRIDGWATER	COAST
TONE	1717	TAUNTON	COAST
TRENT	1699	BURTON ON TRENT	COAST - HUMBER
TRENT	1699	GAINSBOROUGH	COAST - HUMBER
TRENT	1699	NEWARK	COAST - HUMBER
TRENT	1699	NOTTINGHAM	COAST - HUMBER
TRENT & MERSEY CANAL	1777	BURTON ON TRENT	CANAL/RIVER TRENT - MERSEY
TRENT & MERSEY CANAL	1779	CALDON	CANAL/RIVER TRENT - MERSEY
TRENT & MERSEY CANAL	1777	FRADLEY JUNCTION	CANAL/RIVER TRENT - MERSEY
TRENT & MERSEY CANAL	1777	GAINSBOROUGH	CANAL/RIVER TRENT - MERSEY
TRENT & MERSEY CANAL	1777	LONG EATON	CANAL/RIVER TRENT - MERSEY
TRENT & MERSEY CANAL	1777	MIDDLEWICH	CANAL/RIVER TRENT - MERSEY
TRENT & MERSEY CANAL	1777	NEWARK	CANAL/RIVER TRENT - MERSEY
TRENT & MERSEY CANAL	1777	NOTTINGHAM	CANAL/RIVER TRENT - MERSEY
TRENT & MERSEY CANAL	1777	PRESTON BROOK	CANAL/RIVER TRENT - MERSEY
TRENT & MERSEY CANAL	1777	STOCKWITH	CANAL/RIVER TRENT - MERSEY
TRENT & MERSEY CANAL	1777	STOKE ON TRENT	CANAL/RIVER TRENT - MERSEY
TRENT & MERSEY CANAL	1777	STONE	CANAL/RIVER TRENT - MERSEY
URE & RIPON CANAL	1772	BOROUGHBRIDGE	RIVER - OUSE
URE & RIPON CANAL	1772	RIPON	RIVER - OUSE
WAVENEY	1670	BUNGAY	RIVER - YARE
WEAVER	1732	NORTHWICH	COAST - MERSEY ESTUARY
WEAVER	1732	WINSFORD	COAST - MERSEY ESTUARY
WELLAND	1670	MARKET DEEPING	COAST - WASH
WELLAND	1670	SPALDING	COAST - WASH
WELLAND	1670	STAMFORD	COAST - WASH
WEY	1763	GODALMING	RIVER - THAMES
WEY	1653	GUILDFORD	RIVER - THAMES
WEY	1653	WEYBRIDGE	RIVER - THAMES
WEY	1653	WOKING	RIVER - THAMES
WITHAM	0	BOSTON	COAST - BOSTON
WITHAM	0	LINCOLN	COAST - BOSTON
WREAK	1797	MELTON MOWBRAY	CANAL - LEICESTER
WYE	1727	CHEPSTOW	COAST
WYE	1727	HEREFORD	COAST
WYE	1727	MONMOUTH	COAST
WYE	1727	ROSS	COAST
WYRLEY & ESSINGTON CANAL	1792	BIRMINGHAM	CANAL BHAM - HORSLEY FIELDS - WYRLEY
WYRLEY & ESSINGTON CANAL	1794	BIRMINGHAM	CANAL - COVENTRY
WYRLEY & ESSINGTON CANAL	1792	BROWNHILLS	CANAL - COVENTRY/BIRMINGHAM
WYRLEY & ESSINGTON CANAL	1799	WALSALL	CANAL - COVENTRY/BIRMINGHAM
WYRLEY & ESSINGTON CANAL	1769	WEDNESBURY	CANAL - COVENTRY/BIRMINGHAM
WYRLEY & ESSINGTON CANAL	1792	WOLVERHAMPTON	CANAL - COVENTRY/BIRMINGHAM
WYRLEY & ESSINGTON CANAL	1792	WYRLEY	CANAL - COVENTRY/BIRMINGHAM
YARE	0	NORWICH	COAST - YARMOUTH
YARE	0	YARMOUTH	COAST - YARMOUTH



DESTINATIONS OF SHIPS AND BARGES FROM LONDON WHARFS - 1793' APPENDIX 4 Page 1.  
From Universal British Directory (1793).

DESTINATION	LOCALE	NO OF SHIPS	RIVER OR CANAL NAME	CANAL OR RIVER CONNECTION	LONDON WHARF
ABERDEEN	COAST	0			GLASSGOW WHARF
ABERDEEN	COAST	7			HAWLEYS WHARF
ABERDOVY	COAST	2			PICKLE HERRING WHARF
ABERGAVENNY	INLAND	1			PICKLE HERRING WHARF
ABINGDON	RIVER	3	THAMES		BROOKES WHARF
AIRMYN	RIVER	4	OUSE (YORKS)		GUN & SHOT WHARF
AIRMYN	RIVER	8	OUSE (YORKS)		STANTONS WHARF
AIRMYN & SELBY	RIVER	1	OUSE (YORKS)		GRIFFINS WHARF
ALDEBOROUGH	COAST	1			HARRISONS WHARF
ALDEBOROUGH	COAST	2			SMART & DICE QUAY
ALLOA	OVERLAND	1	(COASTAL PORT)	FORTH & CLYDE	HAWLEYS WHARF
ALNMOUTH	COAST	1			BELL WHARF
ALNMOUTH	COAST	1			RED LION WHARF
ALNWICK	INLAND	1			RED LION WHARF
ALRESFORD	INLAND	5			HAYES WHARF
ANDOVER	INLAND	0			KENNETS WHARF
ANSTRUTHER	COAST	1			HAWLEYS WHARF
ANSTRUTHER	COAST	1			SCOTCH WHARF
APPLEBY	INLAND	1			GRIFFINS WHARF
APPLEBY	INLAND	9			GUN & SHOT WHARF
APPLEBY	INLAND	8			HAYES WHARF
APPLEDORE	RIVER	2	ROTHER (EASTERN)		YOXALLS WHARF
ARBROATH	COAST	12			HOARES WHARF
ARBROATH	COAST	2			SCOTCH WHARF
ARUNDEL	RIVER	1	ARUN (SUSSEX)		COTTONS WHARF
ARUNDEL	RIVER	1	ARUN (SUSSEX)		YOXALLS WHARF
ASH	INLAND	2			CHESTER & BREWERS QUAY
ASHBURNHAM	INLAND	3			YOXALLS WHARF
ASHBURTON	INLAND	1			COTTONS WHARF
ASHBURTON	INLAND	5			HAYES WHARF
ASHBURTON	INLAND	4			STANTONS WHARF
ASHBURTON	INLAND	7			TOPPINGS WHARF
ATTLEBOROUGH	INLAND	7			SMART & DICE QUAY
ATTLEBOROUGH	INLAND	7			SYMONDS WHARF
AXMINSTER	INLAND	4			HAWLEYS WHARF
AXMINSTER	INLAND	2			HAYES WHARF
AXMINSTER	INLAND	1			TOPPINGS WHARF
AYR	COAST	1			GLASGOW WHARF
AYR	COAST	8			HAWLEYS WHARF
AYR	OVERLAND	6	(COASTAL PORT)	FORTH & CLYDE	HOARES WHARF
AYR	OVERLAND	1	(COASTAL PORT)	FORTH & CLYDE	SCOTCH WHARF
BAKEWELL	INLAND	5			STANTONS WHARF
BANFF	COAST	7			HAWLEYS WHARF
BANFF	COAST	5			HOARES WHARF
BANGOR	COAST	1			PICKLE HERRING WHARF
BARHAM	INLAND	2			CHESTER & BREWERS QUAY
BARMOUTH	COAST	2			PICKLE HERRING WHARF
BARNARD CASTLE	INLAND	3			BEALES WHARF
BARNARD CASTLE	INLAND	8			HAYES WHARF
BARNLEY	INLAND	1			GRIFFINS WHARF



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DESTINATION	LOCALE	NO OF SHIPS	RIVER OR CANAL NAME	CANAL OR RIVER CONNECTION	LONDON WHARF
BARNLEY	INLAND	8			STANTONS WHARF
BARNSTAPLE	COAST	2			COTTONS WHARF
BARNSTAPLE	COAST	5			GRIFFINS WHARF
BARNSTAPLE	OVERLAND	4	COASTAL PORT		STANTONS WHARF
BARNSTAPLE	OVERLAND	7	COASTAL PORT		TOPPINGS WHARF
BARROW-IN-FURNESS	COAST	6		FORTH & CLYDE	HAWLEYS WHARF
BATH	RIVER	5	AVON (BRISTOL)		GRIFFINS WHARF
BATH	OVERLAND	9	AVON (BRISTOL)		KENNETS WHARF
BATTLE	INLAND	3			YOXALLS WHARF
BAWTRY	RIVER	10	IDLE		IRONGATE WHARF
BAWTRY	RIVER	5	IDLE		SMART & DICE QUAY
BEAUMARIS	COAST	1			PICKLE HERRING WHARF
BECCLES	RIVER	7	WAVENEY		SYMONDS WHARF
BEECHES	RIVER	7	WAVENEY		SMART & DICE QUAY
BELFORD	COAST	6			PARSONS STAIRS
BERVIE	COAST	4			HOARES WHARF
BERWICK	COAST	1			HAWLEYS WHARF
BERWICK	COAST	1			RED LION WHARF
BERWICK	COAST	1			SCOTCH WHARF
BERWICK	COAST	2			THREE CRANES WHARF
BERWICK	COAST	6			PARSONS STAIRS
BEVERLEY	RIVER	6	HULL		CUSTOM HOUSE QUAY
BEVERLEY	RIVER	5	HULL		SMART & DICE QUAY
BILDERSTONE	INLAND	4			HARRISONS WHARF
BILLINGBOROUGH	INLAND	8			STANTONS WHARF
BIRMINGHAM	CANAL	10	BIRMINGHAM	STAFFS & WORCS	IRONGATE WHARF
BIRMINGHAM	CANAL	1	BIRMINGHAM	STAFFS & WORCS	PICKLE HERRING WHARF
BLACKBURN	INLAND	6			GRIFFINS WHARF
BLACKBURN	INLAND	5			STANTONS WHARF
BLANDFORD	INLAND	1			GRIFFINS WHARF
BLEWBURY	INLAND	1			BROOKES WHARF
BOCKING	INLAND	3			HARRISONS WHARF
BODMIN	INLAND	3			HAYES WHARF
BODMIN	INLAND	5			YOXALLS WHARF
BOLTON	INLAND	5			STANTONS WHARF
BOSTON	COAST	3			GUN & SHOT WHARF
BOSTON	COAST	8			STANTONS WHARF
BOTESDALE	INLAND	5			SMART & DICE QUAY
BOXFORD	INLAND	4			HARRISONS WHARF
BRADFORD	CANAL	4	BRADFORD	LEEDS & LIVERPOOL	GUN & SHOT WHARF
BRADFORD	CANAL	8	BRADFORD	LEEDS & LIVERPOOL	STANTONS WHARF
BRAINTREE	INLAND	3			HARRISONS WHARF
BRECHIN	INLAND	4			HOARES WHARF
BRENTFORD	RIVER	0	THAMES		BULLS WHARF
BRENTFORD	RIVER	0	THAMES		GLOBE
BRIDGNORTH	RIVER	5	SEVERN		GRIFFINS WHARF
BRIDLINGTON	COAST	2			BELL WHARF
BRIDLINGTON	COAST	2			RED LION WHARF
BRIDPORT	COAST	3			COTTONS WHARF



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DESTINATION	LOCALE	NO OF SHIPS	RIVER OR CANAL NAME	CANAL OR RIVER CONNECTION	LONDON WHARF
BRIDPORT	COAST	4			HAWLEYS WHARF
BRIDPORT	COAST	2			HAYES WHARF
BRIDPORT	COAST	3			TOPPINGS WHARF
BRIGHTON	COAST	2			GRIFFINS WHARF
BRIGHTON	COAST	2			YOYALLS WHARF
BRISTOL	RIVER	5	AVON (BRISTOL)		GRIFFINS WHARF
BRISTOL	OVERLAND	0	AVON (BRISTOL)		KENNETS WHARF
BROADSTAIRS	COAST	1			CHESTER & BREWERS QUAY
BROMLEY ? BRENT ELEIGH	INLAND	4			HARRISONS WHARF
BROMPTON	COAST	1			HARRISONS WHARF
BUNGAY	RIVER	7	WAVENEY		SMART & DICE QUAY
BUNGAY	RIVER	7	WAVENEY		SYMONDS WHARF
BURNLEY	INLAND	4			GUN & SHOT WHARF
BURTON	RIVER	10	TRENT		IRONGATE WHARF
BURTON IN KENDAL	INLAND	3			GUN & SHOT WHARF
BURWASH	INLAND	2			BROOKES WHARF
BURWASH	INLAND	1			BULLS WHARF
BURY	INLAND	9			COTTONS WHARF
BURY	INLAND	6			GRIFFINS WHARF
BURY ST EDMUNDS	RIVER	3	LARK		COTTONS WHARF
BURY ST EDMUNDS	RIVER	3	LARK		SMART & DICE QUAY
CAMBRIDGE	RIVER	7	CAM	GT OUSE	COTTONS WHARF
CAMELFORD	INLAND	12			COTTONS WHARF
CAMELFORD	INLAND	4			STANTONS WHARF
CAMPBLETON	COAST	1			HAWLEYS WHARF
CANTERBURY	RIVER	2	STOUR (KENT)		CHESTER & BREWERS QUAY
CARDIFF	COAST	3			GRIFFINS WHARF
CARDIGAN	COAST	1			PICKLE HERRING WHARF
CARLISLE	INLAND	2			COTTONS WHARF
CARMARTHAN	RIVER	1	TOWY		PICKLE HERRING WHARF
CARNARVON	COAST	3			PICKLE HERRING WHARF
CARRON	CANAL	5	CARRON CUT	FORTH & CLYDE	GLASGOW WHARF
CARRON	CANAL	6	CARRON CUT	FORTH & CLYDE	HAWLEYS WHARF
CHAILEY	INLAND	2			YOYALLS WHARF
CHARD	INLAND	3			COTTONS WHARF
CHARD	INLAND	4			HAWLEYS WHARF
CHARD	INLAND	1			TOPPINGS WHARF
CHATHAM	COAST	1			HARRISONS WHARF
CHATHAM	COAST	2			SMART & DICE QUAY
CHELMSFORD	INLAND	3			HARRISONS WHARF
CHEPSTOW	RIVER	3	WYE		GRIFFINS WHARF
CHEPSTOW	RIVER	1	WYE		PICKLE HERRING WHARF
CHERTSEY	RIVER	1	THAMES		BULLS WHARF
CHESTER	CANAL	2	CHESTER		COTTONS WHARF
CHESTER	CANAL	4	CHESTER		YOYALLS WHARF
CHESTERFIELD	CANAL	10	CHESTERFIELD		IRONGATE WHARF
CHESTERFIELD	CANAL	3	CHESTERFIELD		SMART & DICE QUAY
CHICHESTER	COAST	2			COTTONS WHARF
CHICHESTER	COAST	1			TOPPINGS WHARF
CHRISTCHURCH	COAST	3			BEALES WHARF



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DESTINATION	LOCALE	NO OF SHIPS	RIVER OR CANAL NAME	CANAL OR RIVER CONNECTION	LONDON WHARF
CHRISTCHURCH	COAST	1			GRIFFINS WHARF
CHRISTCHURCH	COAST	5			HAYES WHARF
CLEY	COAST	1			HARRISONS WHARF
CLIFFE	INLAND	1			TOPPINGS WHARF
COBHAM	INLAND	1			TOPPINGS WHARF
COLCHESTER	RIVER	1	COLNE		CHESTER & BREWERS QUAY
COLCHESTER	RIVER	1	COLNE		CUSTOM HOUSE QUAY
COLDSTREAM	INLAND	6			PARSONS STAIRS
CONWAY	COAST	2			COTTONS WHARF
CONWAY	COAST	1			PICKLE HERRING WHARF
CONWAY	COAST	4			YOXALLS WHARF
COOKHAM	RIVER	3	THAMES		BROOKES WHARF
COUPAR OF ANGUS	INLAND	4			HOARES WHARF
COUPAR OF FIFE	INLAND	7			HOARES WHARF
COUPAR OF FIFE	INLAND	2			SCOTCH WHARF
CREDITON	INLAND	4			STANTONS WHARF
CREDITON	INLAND	7			TOPPINGS WHARF
CREWKERNE	INLAND	4			TOPPINGS WHARF
CROMARTY	COAST	3			HAWLEYS WHARF
CROMARTY	COAST	1			HOARES WHARF
CROMER	COAST	1			HARRISONS WHARF
CROMER	COAST	7			SYMONDS WHARF
CROWHURST	INLAND	3			YOXALLS WHARF
CULLEN	COAST	5			HOARES WHARF
CULLOMPTON	INLAND	4			STANTONS WHARF
DALKEITH	INLAND	1			SCOTCH WHARF
DARLINGTON	INLAND	3			BEALES WHARF
DARLINGTON	INLAND	8			HAYES WHARF
DARTFORD	RIVER	1	THAMES		BULLS WHARF
DARTMOUTH	COAST	1			COTTONS WHARF
DARTMOUTH	COAST	3			HAYES WHARF
DEAL	COAST	3			CHESTER & BREWERS QUAY
DEAL	COAST	1			SMART & DICE QUAY
DEDHAM	RIVER	4	STOUR (SUFFOLK)		HARRISONS WHARF
DEEPING	RIVER	3	WELLAND		GUN & SHOT WHARF
DENBIGH	INLAND	4			YOXALLS WHARF
DERBY	RIVER	10	TRENT		IRONGATE WHARF
DERBY	RIVER	5	TRENT		SMART & DICE QUAY
DEREHAM	INLAND	1			HARRISONS WHARF
DEREHAM	INLAND	7			SMART & DICE QUAY
DEREHAM	INLAND	7			SYMONDS WHARF
DEVIZES	INLAND	0			KENNETS WHARF
DEWSBURY	RIVER	1	CALDER & HEBBLE		GRIFFINS WHARF
DEWSBURY	RIVER	8	CALDER & HEBBLE		STANTONS WHARF
DIGBY	INLAND	8			STANTONS WHARF
DISS	INLAND	5			SMART & DICE QUAY
DISS	INLAND	7			SYMONDS WHARF
DONCASTER	RIVER	5	DON		STANTONS WHARF
DORCHESTER	INLAND	3			COTTONS WHARF
DORCHESTER	INLAND	4			TOPPINGS WHARF



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DESTINATION	LOCALE	NO OF SHIPS	RIVER OR CANAL NAME	CANAL OR RIVER CONNECTION	LONDON WHARF
DOVER	COAST	1			CHESTER & BREWERS QUAY
DUMBARTON	COAST	7			HAWLEYS WHARF
DUMBARTON	OVERLAND	1	(COASTAL PORT)	FORTH & CLYDE	SCOTCH WHARF
DUMFRIES	RIVER	7	NITH	SOLWAY FIRTH	HAWLEYS WHARF
DUMFRIES	OVERLAND	1	NITH	FORTH & CLYDE	SCOTCH WHARF
DUNBAR	COAST	1			HAWLEYS WHARF
DUNBAR	COAST	6			PARSONS STAIRS
DUNBAR	COAST	1			SCOTCH WHARF
DUNDEE	COAST	12			HOARES WHARF
DUNDEE	COAST	2			SCOTCH WHARF
DUNFERMLINE	INLAND	6			HOARES WHARF
DUNKELD	INLAND	7			HOARES WHARF
DUNKELD	INLAND	2			SCOTCH WHARF
DUNMOW	INLAND	1			CHESTER & BREWERS QUAY
DUNS	INLAND	6			PARSONS STAIRS
DUNWICH	COAST	2			HARRISONS WHARF
DUNWICH	COAST	2			SMART & DICE QUAY
DURHAM	INLAND	3			BEALES WHARF
DURHAM	INLAND	8			HAYES WHARF
DYSART	COAST	6			HOARES WHARF
EDINBURGH	OVERLAND	7	(COASTAL PORT)	FORTH & CLYDE	HAWLEYS WHARF
EDINBURGH	COAST	6			HOARES WHARF
EDINBURGH	COAST	1			SCOTCH WHARF
ELHAM	INLAND	2			CHESTER & BREWERS QUAY
EXETER	CANAL	8	EXETER		STANTONS WHARF
EXETER	CANAL	7	EXETER		TOPPINGS WHARF
EYETHORNE	INLAND	2			CHESTER & BREWERS QUAY
FAKENHAM	INLAND	2			HARRISONS WHARF
FALKIRK	CANAL	1	FORTH & CLYDE	FORTH & CLYDE	GLASGOW WHARF
FALMOUTH	COAST	5			BEALES WHARF
FALMOUTH	COAST	5			YOXALLS WHARF
FARRINGDON	INLAND	3			BROOKES WHARF
FAVERSHAM	COAST	4			BEALES WHARF
FINDHORN	COAST	3			HAWLEYS WHARF
FINDHORN	COAST	1			HOARES WHARF
FLINT	COAST	4			YOXALLS WHARF
FOLKINGHAM	INLAND	3			STANTONS WHARF
FOLKSTONE	COAST	1			CHESTER & BREWERS QUAY
FOLKSTONE	COAST	2			GUN & SHOT WHARF
FORDINGBRIDGE	INLAND	1			GRIFFINS WHARF
FORDINGERIDGE	INLAND	5			HAYES WHARF
FORFAR	INLAND	2			SCOTCH WHARF
FORT GEORGE	COAST	3			HAWLEYS WHARF
FORT GEORGE	COAST	1			HOARES WHARF
FOWEY	COAST	2			BEALES WHARF
FOWEY	COAST	3			HAYES WHARF
FRODSHAM	RIVER	6	WEAVER		GRIFFINS WHARF
FRODSHAM	RIVER	5	WEAVER		STANTONS WHARF
FRODSHAM	RIVER	4	WEAVER		YOXALLS WHARF
GAINSBOROUGH	RIVER	5	TRENT		BELL WHARF



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DESTINATION	LOCALE	NO OF SHIPS	RIVER OR CANAL NAME	CANAL OR RIVER CONNECTION	LONDON WHARF
GAINSBOROUGH	RIVER	6	TRENT		CUSTOM HOUSE QUAY
GAINSBOROUGH	RIVER	10	TRENT		IRONGATE WHARF
GAINSBOROUGH	RIVER	1	TRENT		RED LION WHARF
GAINSBOROUGH	RIVER	5	TRENT		SMART & DICE QUAY
GAINSBOROUGH	RIVER	3	TRENT		THREE CRANES WHARF
GARSTANG	INLAND	6			GRIFFINS WHARF
GLAMIS	INLAND	4			HOARES WHARF
GLAMIS	INLAND	2			SCOTCH WHARF
GLASGOW	OVERLAND	1	CLYDE	FORTH & CLYDE	GLASGOW WHARF
GLASGOW	OVERLAND	14	CLYDE	FORTH & CLYDE	HAWLEYS WHARF
GLASGOW	OVERLAND	6	CLYDE	FORTH & CLYDE	HOARES WHARF
GLASGOW	OVERLAND	1	CLYDE	FORTH & CLYDE	SCOTCH WHARF
GLOUCESTER	OVERLAND	4	THAMES & SEVERN		BROOKES WHARF
GLOUCESTER	RIVER	5	SEVERN		GRIFFINS WHARF
GLOUCESTER	RIVER	1	SEVERN		PICKLE HERRING WHARF
GODALMING	RIVER	0	WEY		BULLS WHARF
GURING	RIVER	1	THAMES		BROOKES WHARF
GOSPORT	COAST	8			BEALES WHARF
GOSPORT	COAST	5			HAYES WHARF
GRAMPOUND	INLAND	5			YOXALLS WHARF
GRANTHAM	INLAND	10			IRONGATE WHARF
GRAVESEND	COAST	1			COTTONS WHARF
GRAVESEND	COAST	1			TOPPINGS WHARF
GREENOCK	COAST	1			GLASGOW WHARF
GREENOCK	COAST	8			HAWLEYS WHARF
GREENOCK	OVERLAND	6	(COASTAL PORT)	FORTH & CLYDE	HOARES WHARF
GREENOCK	OVERLAND	1	(COASTAL PORT)	FORTH & CLYDE	SCOTCH WHARF
GUILDFORD	RIVER	0	WEY		BULLS WHARF
GUISBOROUGH	INLAND	8			HAYES WHARF
GUISBOROUGH	INLAND	3			TOPPINGS WHARF
HADDINGTON	INLAND	1			HAWLEYS WHARF
HADDINGTON	INLAND	6			PARSONS STAIRS
HADLEIGH (SUFFOLK)	INLAND	4			HARRISONS WHARF
HALESWORTH	RIVER	2	ANT		HARRISONS WHARF
HALESWORTH	RIVER	2	ANT		SMART & DICE QUAY
HALIFAX	INLAND	6			CUSTOM HOUSE QUAY
HALIFAX	INLAND	4			GUN & SHOT WHARF
HALIFAX	INLAND	5			SMART & DICE QUAY
HALIFAX	INLAND	8			STANTONS WHARF
HALSTEAD	INLAND	1			CHESTER & BREWERS QUAY
HAMMERSMITH	RIVER	0	THAMES		BULLS WHARF
HAMPTON	RIVER	0	THAMES		BULLS WHARF
HAMPTON COURT	RIVER	0	THAMES		GLOBE
HARLESTON	INLAND	7			SMART & DICE QUAY
HARLESTON	INLAND	7			SYMONDS WHARF
HARWICH	COAST	4			HARRISONS WHARF
HARWICH	COAST	5			SMART & DICE QUAY
HASTINGS	COAST	3			YOXALLS WHARF
HATFIELD	INLAND	5			STANTONS WHARF
HAVANT	INLAND	8			BEALES WHARF



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DESTINATION	LOCALE	NO OF SHIPS	RIVER OR CANAL NAME	CANAL OR RIVER CONNECTION	LONDON WHARF
HAVANT	INLAND	1			TOPPINGS WHARF
HAVERFORDWEST	RIVER	4	WESTERN CLEDDAU		PICKLE HERRING WHARF
HELSTONE	INLAND	5			YOXALLS WHARF
HENLEY	RIVER	2	THAMES		BROOKES WHARF
HEREFORD	RIVER	5	WYE		GRIFFINS WHARF
HEREFORD	RIVER	1	WYE		PICKLE HERRING WHARF
HIGHAM	INLAND	1			TOPPINGS WHARF
HINGHAM	INLAND	7			SMART & DICE QUAY
HOLBEACH	INLAND	4			COTTONS WHARF
HOLBEACH	INLAND	3			GUN & SHOT WHARF
HOLBECK	INLAND	8			STANTONS WHARF
HOLT	INLAND	1			HARRISONS WHARF
HOLYWELL	COAST	2			COTTONS WHARF
HOLYWELL	COAST	4			YOXALLS WHARF
HONITON	INLAND	4			HAWLEYS WHARF
HONITON	INLAND	2			HAYES WHARF
HONITON	INLAND	4			STANTONS WHARF
HONITON	INLAND	8			TOPPINGS WHARF
HORNCASTLE	INLAND	8			STANTONS WHARF
HOWDEN	RIVER	4	OUSE (YORKS)		GUN & SHOT WHARF
HOWDEN	RIVER	8	OUSE (YORKS)		STANTONS WHARF
HUBBERSTONE	COAST	4			PICKLE HERRING WHARF
HUDDERSFIELD	CANAL	4	SIR JOHN RAMSDENS		GRIFFINS WHARF
HUDDERSFIELD	CANAL	4	SIR JOHN RAMSDENS		GUN & SHOT WHARF
HUDDERSFIELD	CANAL	8	SIR JOHN RAMSDENS		STANTONS WHARF
HULL	COAST	6			CUSTOM HOUSE QUAY
HULL	COAST	5			SMART & DICE QUAY
HULL & COUNTIES	COAST	5			CHAMBERLAINS WHARF
HUNGERFORD	INLAND	0			KENNETS WHARF
ILMINSTER	INLAND	4			HAWLEYS WHARF
INGHAM	INLAND	7			SYMONDS WHARF
INVERKEITHING	COAST	1			SCOTCH WHARF
INVERNESS	COAST	4			HAWLEYS WHARF
INVERNESS	COAST	1			HOARES WHARF
IPSWICH	COAST	5			SMART & DICE QUAY
ISLE OF MAN	COAST	2			COTTONS WHARF
ISLE OF WIGHT	COAST	8			BEALES WHARF
ISLEWORTH	RIVER	0	THAMES		BULLS WHARF
ISLEWORTH	RIVER	0	THAMES		GLOBE
IXWORTH	INLAND	5			SMART & DICE QUAY
JEDBURGH	INLAND	6			PARSONS STAIRS
KELSO	INLAND	6			PARSONS STAIRS
KELVEDON	INLAND	3			HARRISONS WHARF
KENDAL	INLAND	11			COTTONS WHARF
KENDAL	INLAND	12			GRIFFINS WHARF
KENDAL	INLAND	3			GUN & SHOT WHARF
KENDAL	INLAND	5			STANTONS WHARF
KEW	RIVER	0	THAMES		BULLS WHARF
KEW	RIVER	0	THAMES		GLOBE
KILMARNOCK	INLAND	1			GLASSGOW WHARF



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DESTINATION	LOCALE	NO OF SHIPS	RIVER OR CANAL NAME	CANAL OR RIVER CONNECTION	LONDON WHARF
KILMARNOCK	INLAND	1			HAWLEYS WHARF
KILMARNOCK	OVERLAND	1	INLAND	FORTH & CLYDE	SCOTCH WHARF
KINGHORN	COAST	1			SCOTCH WHARF
KINGSGATE	COAST	1			CHESTER & BREWERS QUAY
KINGSTON	RIVER	6	THAMES		BULLS WHARF
KINGSTON	RIVER	0	THAMES		GLOBE
KIRKALDY	COAST	1			SCOTCH WHARF
KIRKCUDBRIGHT	COAST	1			PICKLE HERRING WHARF
KNARESBOROUGH	INLAND	5			GUN & SHOT WHARF
LANCASTER	INLAND	9			COTTONS WHARF
LANCASTER	INLAND	6			GRIFFINS WHARF
LANCASTER	INLAND	3			GUN & SHOT WHARF
LANCASTER	INLAND	5			STANTONS WHARF
LAUNCESTON	INLAND	3			HAYES WHARF
LAVENHAM	INLAND	4			HARRISONS WHARF
LEAKE	INLAND	8			STANTONS WHARF
LECHLADE	RIVER	4	THAMES		BROOKES WHARF
LEEDS	INLAND	2			BROOKES WHARF
LEEDS	INLAND	1			BULLS WHARF
LEEDS	CANAL	6	LEEDS & LIVERPOOL		CUSTOM HOUSE QUAY
LEEDS	CANAL	1	LEEDS & LIVERPOOL		GRIFFINS WHARF
LEEDS	CANAL	4	LEEDS & LIVERPOOL		GUN & SHOT WHARF
LEEDS	CANAL	5	LEEDS & LIVERPOOL		SMART & DICE QUAY
LEEDS	CANAL	8	LEEDS & LIVERPOOL		STANTONS WHARF
LEEK	INLAND	9			COTTONS WHARF
LEEK	INLAND	6			GRIFFINS WHARF
LEEK	INLAND	1			PICKLE HERRING WHARF
LEEK	INLAND	5			STANTONS WHARF
LEICESTER	INLAND	10			IRONGATE WHARF
LEITH	COAST	2			GLASGOW WHARF
LEITH	OVERLAND	7	(COASTAL PORT)	FORTH & CLYDE	HAWLEYS WHARF
LEITH	COAST	6			HOARES WHARF
LEITH	COAST	1			SCOTCH WHARF
LEWES	RIVER	2	OUSE (SUSSEX)		YOXALLS WHARF
LINCOLN	RIVER	6	WITHAM		CUSTOM HOUSE QUAY
LINCOLN	RIVER	5	WITHAM		SMART & DICE QUAY
LINCOLN	RIVER	8	WITHAM		STANTONS WHARF
LISKEARD	INLAND	3			HAYES WHARF
LITTLEHAMPTON	COAST	1			YOXALLS WHARF
LIVERPOOL	COAST	9			COTTONS WHARF
LIVERPOOL	COAST	6			GRIFFINS WHARF
LIVERPOOL	OVERLAND	10	(COASTAL PORT)	TRENT & MERSEY	IRONGATE WHARF
LIVERPOOL	COAST	1			PICKLE HERRING WHARF
LIVERPOOL	COAST	5			STANTONS WHARF
LODDON	INLAND	7			SMART & DICE QUAY
LODDON	INLAND	7			SYMONDS WHARF
LOOE	COAST	2			BEALES WHARF
LOOE	COAST	3			HAYES WHARF
LOSSIEMOUTH	COAST	1			HOARES WHARF
LOUTH	CANAL	5	LOUTH		STANTONS WHARF



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DESTINATION	LOCALE	NO OF SHIPS	RIVER OR CANAL NAME	CANAL OR RIVER CONNECTION	LONDON WHARF
LOWESTOFT	COAST	2			HARRISONS WHARF
LOWESTOFT	COAST	7			SMART & DICE QUAY
LOWESTOFT	COAST	7			SYMONDS WHARF
LYDD	INLAND	2			YOXALLS WHARF
LYME	COAST	4			HAWLEYS WHARF
LYME	COAST	2			HAYES WHARF
LYME	COAST	1			TOPPINGS WHARF
LYMINGE	INLAND	2			CHESTER & BREWERS QUAY
LYMINGTON	COAST	8			CHAMBERLAINS WHARF
LYMINGTON	COAST	5			HAYES WHARF
LYNN	COAST	3			COTTONS WHARF
MACCLESFIELD	INLAND	9			COTTONS WHARF
MACCLESFIELD	INLAND	6			GRIFFINS WHARF
MACCLESFIELD	INLAND	10			STANTONS WHARF
MACHYNLETH	RIVER	2	TOWY		PICKLE HERRING WHARF
MAIDENHEAD	RIVER	1	THAMES		BROOKES WHARF
MAIDSTONE	RIVER	4	MEDWAY		BEALES WHARF
MAIDSTONE	RIVER	2	MEDWAY		BROOKES WHARF
MAIDSTONE	RIVER	2	MEDWAY		BULLS WHARF
MAIDSTONE	RIVER	1	MEDWAY		COTTONS WHARF
MAIDSTONE	RIVER	2	MEDWAY		THREE CRANES WHARF
MALDON	COAST	3			HARRISONS WHARF
MANCHESTER	OVERLAND	6	MERSEY/IRWELL	TRENT & MERSEY	CUSTOM HOUSE QUAY
MANCHESTER	RIVER	7	MERSEY/IRWELL		GRIFFINS WHARF
MANCHESTER	OVERLAND	4	MERSEY/IRWELL	TRENT & MERSEY	GUN & SHOT WHARF
MANCHESTER	OVERLAND	10	MERSEY/IRWELL	TRENT & MERSEY	IRONGATE WHARF
MANCHESTER	RIVER	1	MERSEY/IRWELL		PICKLE HERRING WHARF
MANCHESTER	OVERLAND	5	MERSEY/IRWELL	TRENT & MERSEY	SMART & DICE QUAY
MANCHESTER	OVERLAND	13	MERSEY/IRWELL	TRENT & MERSEY	STANTONS WHARF
MANNINGTREE	COAST	4			HARRISONS WHARF
MANSFIELD	INLAND	10			IRONGATE WHARF
MARAZION	COAST	5			YOXALLS WHARF
MARGATE	COAST	1			CHESTER & BREWERS QUAY
MARGATE	COAST	5			SMART & DICE QUAY
MARLBOROUGH	INLAND	0			KENNETS WHARF
MARLOW	RIVER	3	THAMES		BROOKES WHARF
MELCOMB REGIS	COAST	4			TOPPINGS WHARF
MENDHAM	INLAND	7			SMART & DICE QUAY
MEOPHAM	INLAND	1			TOPPINGS WHARF
MEVAGISSY	COAST	2			BEALES WHARF
MIDDLEWICH	CANAL	6	TRENT & MERSEY		GRIFFINS WHARF
MILFORD	COAST	4			PICKLE HERRING WHARF
MILTON	COAST	2			BEALES WHARF
MODBURY	INLAND	5			HAYES WHARF
MONGEHAM GREAT	INLAND	1			SMART & DICE QUAY
MONMOUTH	RIVER	5	WYE		GRIFFINS WHARF
MONTROSE	COAST	4			HOARES WHARF
MUSSLEBURGH	OVERLAND	7	COASTAL PORT	FORTH & CLYDE	HAWLEYS WHARF
NEATH	COAST	2			YOXALLS WHARF
NEEDHAM	INLAND	7			SMART & DICE QUAY



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DESTINATION	LOCALE	NO OF SHIPS	RIVER OR CANAL NAME	CANAL OR RIVER CONNECTION	LONDON WHARF
NEEDHAM	INLAND	7			SYMONDS WHARF
NEEDHAM (MARKET)	RIVER	5	GIPPING		SMART & DICE QUAY
NEW ROMNEY	COAST	2			GUN & SHOT WHARF
NEWARK	RIVER	10	TRENT		IRONGATE WHARF
NEWBURGH (FIFE)	COAST	2			SCOTCH WHARF
NEWBURY	RIVER	3	KENNET		BROOKES WHARF
NEWBURY	RIVER	0	KENNET		KENNETS WHARF
NEWCASTLE UNDER LYME	INLAND	6			GRIFFINS WHARF
NEWCASTLE UNDER LYME	INLAND	10			IRONGATE WHARF
NEWCASTLE UNDER LYME	INLAND	1			PICKLE HERRING WHARF
NEWCASTLE-UPON-TYNE	RIVER	8	TYNE		BELL WHARF
NEWCASTLE-UPON-TYNE	RIVER	1	TYNE		HARRISONS WHARF
NEWCASTLE-UPON-TYNE	RIVER	9	TYNE		RED LION WHARF
NEWCASTLE-UPON-TYNE	RIVER	10	TYNE		THREE CRANES WHARF
NEWHAVEN	COAST	2			YOXALLS WHARF
NONINGTON	INLAND	2			CHESTER & BREWERS QUAY
NORTH WALSHAM	INLAND	7			SMART & DICE QUAY
NORTH WALSHAM	INLAND	7			SYMONDS WHARF
NORTHALLERTON	INLAND	5			GUN & SHOT WHARF
NORTHALLERTON	INLAND	8			HAYES WHARF
NORTHAMPTON	RIVER	4	NENE		COTTONS WHARF
NORTHFLEET	COAST	1			TOPPINGS WHARF
NORTHWICH	CANAL	5	WEAVER	TRENT & MERSEY	STANTONS WHARF
NORTHWICH	RIVER	4	WEAVER	TRENT & MERSEY	YOXALLS WHARF
NORWICH	RIVER	7	YARE		SMART & DICE QUAY
NORWICH	RIVER	7	YARE		SYMONDS WHARF
NOTTINGHAM	RIVER	6	TRENT		CUSTOM HOUSE QUAY
NOTTINGHAM	RIVER	10	TRENT		IRONGATE WHARF
OAKHAMPTON	INLAND	4			STANTONS WHARF
OAKHAMPTON	INLAND	7			TOPPINGS WHARF
ORFORD	COAST	2			SMART & DICE QUAY
ORMSKIRK	INLAND	5			STANTONS WHARF
OSWESTRY	INLAND	4			YOXALLS WHARF
OUNDLE	RIVER	3	NENE		GUN & SHOT WHARF
OXFORD	RIVER	4	THAMES		BROOKES WHARF
PADSTOW	COAST	1			COTTONS WHARF
PADSTOW	COAST	5			YOXALLS WHARF
PAISLEY	OVERLAND	1		FORTH & CLYDE	GLASGOW WHARF
PAISLEY	OVERLAND	14		FORTH & CLYDE	HAWLEYS WHARF
PAISLEY	OVERLAND	6		FORTH & CLYDE	HOARES WHARF
PAISLEY	OVERLAND	1		FORTH & CLYDE	SCOTCH WHARF
PARKGATE	COAST	2			COTTONS WHARF
PARKGATE	COAST	4			YOXALLS WHARF
PEMBROKE	COAST	4			PICKLE HERRING WHARF
PENRITH	INLAND	2			COTTONS WHARF
PENRITH	INLAND	6			GRIFFINS WHARF
PENRITH	INLAND	1			PICKLE HERRING WHARF
PENRITH	INLAND	13			STANTONS WHARF
PENRYN	COAST	5			YOXALLS WHARF
PENZANCE	COAST	5			BEALES WHARF



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DESTINATION	LOCALE	NO OF SHIPS	RIVER OR CANAL NAME	CANAL OR RIVER CONNECTION	LONDON WHARF
PENZANCE	COAST	5			YOXALLS WHARF
PERTH	RIVER	12	TAY	FIRTH OF TAY	HOARES WHARF
PERTH	RIVER	2	TAY	FIRTH OF TAY	SCOTCH WHARF
PETERBOROUGH	RIVER	4	NENE		COTTONS WHARF
PETERHEAD	COAST	7			HAWLEYS WHARF
PETERHEAD	COAST	5			HOARES WHARF
PETERSFIELD	INLAND	8			BEALES WHARF
PETERSFIELD	INLAND	5			HAYES WHARF
PETERSHAM	RIVER	0	THAMES		GLOBE
PETHAM	INLAND	2			CHESTER & BREWERS QUAY
PICKERING	INLAND	3			TOPPINGS WHARF
PLYMOUTH	COAST	2			BEALES WHARF
PLYMOUTH	COAST	3			HAYES WHARF
PLYMOUTH & CORNWALL	COAST	4			CHAMBERLAINS WHARF
POCKLINGTON	INLAND	5			GUN & SHOT WHARF
PONTEFRAC	INLAND	1			GRIFFINS WHARF
PONTEFRAC	INLAND	4			GUN & SHOT WHARF
PONTEFRAC	INLAND	8			STANTONS WHARF
POOLE	COAST	5			COTTONS WHARF
POOLE	COAST	5			YOXALLS WHARF
PORT GLASGOW	COAST	1			GLASGOW WHARF
PORTLAND	COAST	3			COTTONS WHARF
PORTSMOUTH	COAST	8			BEALES WHARF
PORTSMOUTH	COAST	3			CHAMBERLAINS WHARF
PORTSMOUTH	COAST	5			HAYES WHARF
PORTSOY	COAST	7			HAWLEYS WHARF
PORTSOY	COAST	5			HOARES WHARF
POTTERIES	CANAL	10	TRENT & MERSEY		IRONGATE WHARF
PRESCOT	INLAND	5			STANTONS WHARF
PRESTON	RIVER	6	RIBBLE		GRIFFINS WHARF
PRESTON	RIVER	3	RIBBLE		GUN & SHOT WHARF
PRESTON	RIVER	5	RIBBLE		STANTONS WHARF
PUTNEY	RIVER	0	THAMES		BULLS WHARF
PWLLHELI	COAST	2			PICKLE HERRING WHARF
QUEENSFERRY	COAST	1			SCOTCH WHARF
RAMSGATE	COAST	1			CHESTER & BREWERS QUAY
RAMSGATE	COAST	3			SMART & DICE QUAY
RAYNHAM	INLAND	1			HARRISONS WHARF
READING	RIVER	3	THAMES		BROOKES WHARF
READING	RIVER	0	THAMES		KENNETS WHARF
REDRUTH	INLAND	5			YOXALLS WHARF
REEPHAM	INLAND	7			SMART & DICE QUAY
RETFORD	CANAL	10	CHESTERFIELD		IRONGATE WHARF
RICHMOND	RIVER	0	THAMES		BULLS WHARF
RICHMOND	RIVER	0	THAMES		GLOBE
RICHMOND	INLAND	3			HAYES WHARF
RICHMOND	INLAND	8			STANTONS WHARF
RINGWOOD	RIVER	8	AVON (HANTS)		CHAMBERLAINS WHARF
RINGWOOD	OVERLAND	5	AVON (HANTS)		COTTONS WHARF
RINGWOOD	RIVER	1	AVON (HANTS)		GRIFFINS WHARF



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DESTINATION	LOCALE	NO OF SHIPS	RIVER OR CANAL NAME	CANAL OR RIVER CONNECTION	LONDON WHARF
RINGWOOD	RIVER	5	AVON (HANTS)		HAYES WHARF
RIPLEY (YORKS)	INLAND	3			STANTONS WHARF
RIPON	RIVER	5	URE		GUN & SHOT WHARF
RIPON	RIVER	8	URE		STANTONS WHARF
ROBINHOODS BAY	COAST	3			TOPPINGS WHARF
ROCHDALE	INLAND	1			GRIFFINS WHARF
ROCHDALE	INLAND	1			PICKLE HERRING WHARF
ROCHDALE	INLAND	5			STANTONS WHARF
ROCHESTER	COAST	1			HARRISONS WHARF
ROCHESTER	COAST	2			SMART & DICE QUAY
ROTHERHAM	RIVER	5	DON		SMART & DICE QUAY
ROTHERHAM	RIVER	5	DON		STANTONS WHARF
ROTTINGDEAN	COAST	2			YOXALLS WHARF
RUDHAM (EAST)	INLAND	1			HARRISONS WHARF
RUTHIN	INLAND	4			YOXALLS WHARF
RYE	COAST	1			TOPPINGS WHARF
RYE	COAST	2			YOXALLS WHARF
SADDLEWORTH	INLAND	6			GRIFFINS WHARF
SADDLEWORTH	INLAND	5			STANTONS WHARF
SALISBURY	RIVER	8	AVON (HANTS)		BEALES WHARF
SALISBURY	RIVER	5	AVON (HANTS)		HAYES WHARF
SALISBURY	OVERLAND	0	AVON (HANTS)		KENNETS WHARF
SALTASH	COAST	5			HAYES WHARF
SANDWICH	RIVER	2	STOUR (KENT)		CHESTER & BREWERS QUAY
SAXMUNDHAM	INLAND	4			SMART & DICE QUAY
SCARBOROUGH	COAST	3			BELL WHARF
SCARBOROUGH	COAST	2			RED LION WHARF
SEAFORD	COAST	2			YOXALLS WHARF
SELBY	RIVER	4	OUSE (YORKS)		GUN & SHOT WHARF
SELBY	RIVER	8	OUSE (YORKS)		STANTONS WHARF
SETTLE	INLAND	4			GUN & SHOT WHARF
SHAFTESBURY	INLAND	5			COTTONS WHARF
SHEFFIELD	INLAND	6			CUSTOM HOUSE QUAY
SHEFFIELD	INLAND	10			IRONGATE WHARF
SHEFFIELD	INLAND	5			SMART & DICE QUAY
SHEFFIELD	INLAND	5			STANTONS WHARF
SHEPPERTON	RIVER	0	THAMES		GLOBE
SHERBORNE	INLAND	3			COTTONS WHARF
SHERBORNE	INLAND	4			HAWLEYS WHARF
SHOREHAM	COAST	2			GRIFFINS WHARF
SHORNE	INLAND	1			TOPPINGS WHARF
SIDMOUTH	COAST	4			STANTONS WHARF
SIDMOUTH	COAST	1			TOPPINGS WHARF
SKIPTON	OVERLAND	6	LEEDS & LIVERPOOL		GRIFFINS WHARF
SLEAFORD	INLAND	8			STANTONS WHARF
SNAITH	RIVER	13	AIRE		STANTONS WHARF
SOUTH MOLTON	INLAND	4			STANTONS WHARF
SOUTHAMPTON	COAST	8			BEALES WHARF
SOUTHAMPTON	COAST	5			HAYES WHARF
SOUTHAMPTON	OVERLAND	0	COASTAL PORTS		KENNETS WHARF



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DESTINATION	LOCALE	NO OF SHIPS	RIVER OR CANAL NAME	CANAL OR RIVER CONNECTION	LONDON WHARF
SOUTHFLEET	INLAND	1			TOPPINGS WHARF
SOUTHWOLD	COAST	2			HARRISONS WHARF
SPALDING	RIVER	3	WELLAND		GUN & SHOT WHARF
SPILSBY	INLAND	8			STANTONS WHARF
ST ANDREWS	COAST	4			HOARES WHARF
ST ANDREWS	COAST	2			SCOTCH WHARF
ST ASAPH	INLAND	2			COTTONS WHARF
ST AUSTEL	COAST	3			HAYES WHARF
ST DAVIDS	COAST	4			PICKLE HERRING WHARF
ST IVES	COAST	1			COTTONS WHARF
ST IVES	COAST	5			YOXALLS WHARF
ST MICHAELS MOUNT	COAST	5			YOXALLS WHARF
STAFFORD	INLAND	10			IRONGATE WHARF
STAINES	RIVER	1	THAMES		BULLS WHARF
STAMFORD	RIVER	4	WELLAND		COTTONS WHARF
STAMFORD	RIVER	3	WELLAND		GUN & SHOT WHARF
STANFORD	INLAND	2			GUN & SHOT WHARF
STIRLING	OVERLAND	3	FORTH	FORTH & CLYDE	HAWLEYS WHARF
STIRLING	RIVER	6	FORTH	FIRTH OF FORTH	HOARES WHARF
STIRLING	RIVER	1	FORTH	FIRTH OF FORTH	SCOTCH WHARF
STOCKPORT	INLAND	9			COTTONS WHARF
STOCKPORT	INLAND	6			GRIFFINS WHARF
STOCKPORT	INLAND	5			STANTONS WHARF
STOCKTON	RIVER	3	TEES		BEALES WHARF
STOCKTON	RIVER	3	TEES		HAYES WHARF
STOCKWITH	RIVER	1	TRENT		RED LION WHARF
STOKE	INLAND	2			SMART & DICE QUAY
STOKE (BY NAYLAND)	INLAND	1			CHESTER & BREWERS QUAY
STONEHAVEN	COAST	1			GLASGOW WHARF
STONEHAVEN	COAST	7			HAWLEYS WHARF
STOURBRIDGE	OVERLAND	10	STOUR (WORCS)	STAFFS & WORCS	IRONGATE WHARF
STOURPORT	CANAL	10	STAFFS & WORCS	TRENT & MERSEY	IRONGATE WHARF
STOWMARKET	RIVER	5	GIPPING		SMART & DICE QUAY
STRATFORD (ST MARY)	RIVER	1	STOUR (SUFFOLK)		CHESTER & BREWERS QUAY
STROOD	RIVER	1	MEDWAY		HARRISONS WHARF
SUDBURY	RIVER	1	STOUR (SUFFOLK)		CHESTER & BREWERS QUAY
SUDBURY	RIVER	4	STOUR (SUFFOLK)		HARRISONS WHARF
SUNBURY	RIVER	0	THAMES		BULLS WHARF
SUNBURY	RIVER	0	THAMES		GLOBE
SUNDERLAND	COAST	1			BELL WHARF
SUNDERLAND	COAST	9			RED LION WHARF
SUNDERLAND	COAST	10			THREE CRANES WHARF
SWANSEA	COAST	2			YOXALLS WHARF
TAMWORTH	CANAL	10	COVENTRY		IRONGATE WHARF
TAUNTON	OVERLAND	4	TONE		STANTONS WHARF
TAUNTON	OVERLAND	7	TONE		TOPPINGS WHARF
TEDDINGTON	RIVER	0	THAMES		GLOBE
TEIGNMOUTH	COAST	4			STANTONS WHARF
TENTERDEN	INLAND	2			BROOKES WHARF
TENTERDEN	INLAND	1			BULLS WHARF



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DESTINATION	LOCALE	NO OF SHIPS	RIVER OR CANAL NAME	CANAL OR RIVER CONNECTION	LONDON WHARF
TENTERDEN	INLAND	2			YOXALLS WHARF
THAMES DITTON	RIVER	0	THAMES		BULLS WHARF
THAMES DITTON	RIVER	0	THAMES		GLOBE
THETFORD	RIVER	3	OUSE LITTLE		COTTONS WHARF
THETFORD	RIVER	5	OUSE LITTLE		SMART & DICE QUAY
THIRSK	INLAND	5			GUN & SHOT WHARF
THIRSK	INLAND	8			STANTONS WHARF
THORNE	RIVER	5	DON		SMART & DICE QUAY
THORNE	RIVER	5	DON		STANTONS WHARF
TIDESWELL	INLAND	5			STANTONS WHARF
TIVERTON	INLAND	4			STANTONS WHARF
TONBRIDGE	RIVER	1	MEDWAY		COTTONS WHARF
TOPSHAM	COAST	4			STANTONS WHARF
TOPSHAM	COAST	7			TOPPINGS WHARF
TORBAY	COAST	1			COTTONS WHARF
TORRINGTON	INLAND	4			STANTONS WHARF
TOTNES	RIVER	1	DART		COTTONS WHARF
TOTNES	RIVER	5	DART		HAYES WHARF
TOTNES	RIVER	4	DART		STANTONS WHARF
TOTNES	RIVER	7	DART		TOPPINGS WHARF
TREGONY	INLAND	5			YOXALLS WHARF
TRURO	COAST	5			BEALES WHARF
TRURO	COAST	5			YOXALLS WHARF
TUNBRIDGE	RIVER	2	MEDWAY		BROOKES WHARF
TUNBRIDGE	RIVER	1	MEDWAY		BULLS WHARF
TWICKENHAM	RIVER	0	THAMES		BULLS WHARF
TWICKENHAM	RIVER	0	THAMES		GLOBE
UCKFIELD	INLAND	2			YOXALLS WHARF
ULVERSTONE	INLAND	6			GRIFFINS WHARF
ULVERSTONE	INLAND	3			GUN & SHOT WHARF
ULVERSTONE	INLAND	5			STANTONS WHARF
UPNOR	COAST	2			SMART & DICE QUAY
UTTOXETER	INLAND	10			IRONGATE WHARF
WADEBRIDGE	OVERLAND	3	COASTAL PORT		HAYES WHARF
WAKEFIELD	RIVER	6	CALDER		CUSTOM HOUSE QUAY
WAKEFIELD	RIVER	1	CALDER		GRIFFINS WHARF
WAKEFIELD	RIVER	4	CALDER		GUN & SHOT WHARF
WAKEFIELD	RIVER	5	CALDER		SMART & DICE QUAY
WAKEFIELD	RIVER	8	CALDER		STANTONS WHARF
WALLINGFORD	RIVER	3	THAMES		BROOKES WHARF
WALMER	COAST	1			SMART & DICE QUAY
WALPOLE	RIVER	2	NENE		SMART & DICE QUAY
WALSINGHAM	INLAND	1			HARRISONS WHARF
WALTON LE DALE	INLAND	5			STANTONS WHARF
WALTON ON THAMES	RIVER	0	THAMES		BULLS WHARF
WALTON ON THAMES	RIVER	0	THAMES		GLOBE
WANTAGE	INLAND	4			BROOKES WHARF
WARRINGTON	RIVER	9	MERSEY/IRWELL		COTTONS WHARF
WARRINGTON	OVERLAND	10	COASTAL PORT	TRENT & MERSEY	IRONGATE WHARF
WATERINGBURY	RIVER	2	MEDWAY		BROOKES WHARF



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DESTINATION	LOCALE	NO OF SHIPS	RIVER OR CANAL NAME	CANAL OR RIVER CONNECTION	LONDON WHARF
WATERINGBURY	RIVER	1	MEDWAY		BULLS WHARF
WATH	INLAND	5			STANTONS WHARF
WELLINGTON (SOM)	INLAND	4			STANTONS WHARF
WELLINGTON (SOM)	INLAND	1			TOPPINGS WHARF
WELLS	INLAND	5			GRIFFINS WHARF
WELLS	COAST	2			HARRISONS WHARF
WEM	INLAND	4			YOXALLS WHARF
WESTBOURNE	INLAND	1			TOPPINGS WHARF
WESTFIELD.	INLAND	3			YOXALLS WHARF
WESTHAM	INLAND	3			YOXALLS WHARF
WETHERBY	INLAND	1			GRIFFINS WHARF
WEYBRIDGE	RIVER	0	WEY		BULLS WHARF
WEYBRIDGE	RIVER	0	WEY		GLOBE
WEYMOUTH	COAST	3			COTTONS WHARF
WHITEY	COAST	3			TOPPINGS WHARF
WHITCHURCH (HANTS)	INLAND	0			KENNETS WHARF
WHITCHURCH (SHROP)	INLAND	2			COTTONS WHARF
WHITCHURCH (SHROP)	INLAND	4			YOXALLS WHARF
WHITEHAVEN	COAST	11			COTTONS WHARF
WHITEHAVEN	COAST	6			GRIFFINS WHARF
WHITEHAVEN	COAST	5			STANTONS WHARF
WHITSTABLE	COAST	2			CHESTER & BREWERS QUAY
WIGAN	RIVER	5	DOUGLAS		STANTONS WHARF
WILTON	INLAND	0			KENNETS WHARF
WILTON SOM (WILSTONE)	INLAND	4			STANTONS WHARF
WINCANTON	INLAND	5			COTTONS WHARF
WINCHELSEA	RIVER	2	BREDE		YOXALLS WHARF
WINCHESTER	RIVER	8	ITCHEN		BEALES WHARF
WINCHESTER	RIVER	8	ITCHEN		CHAMBERLAINS WHARF
WINCHESTER	RIVER	5	ITCHEN		HAYES WHARF
WINDSOR	RIVER	1	THAMES		BULLS WHARF
WIRKSWORTH	INLAND	10			IRONGATE WHARF
WISBECH	RIVER	4	NENE		COTTONS WHARF
WITHAM	INLAND	3			HARRISONS WHARF
WIVELSCOMBE	INLAND	4			STANTONS WHARF
WIVENHOE	RIVER	1	COLNE		CHESTER & BREWERS QUAY
WOLVERHAMPTON	CANAL	10	STAFFS & WORCS	TRENT & MERSEY	IRONGATE WHARF
WOODBIDGE	COAST	2			SMART & DICE QUAY
WOODCHURCH	INLAND	2			YOXALLS WHARF
WORCESTER	RIVER	5	SEVERN		GRIFFINS WHARF
WORCESTER	RIVER	1	SEVERN		PICKLE HERRING WHARF
WORKSOP	CANAL	10	CHESTERFIELD		IRONGATE WHARF
WREXHAM	INLAND	4			YOXALLS WHARF
WYCOMBE	INLAND	3			BROOKES WHARF
WYMONDEHAM	INLAND	7			SYMONDS WHARF
YARM	RIVER	3	TEES		BEALES WHARF
YARM	RIVER	8	TEES		HAYES WHARF
YARMOUTH	COAST	7			SMART & DICE QUAY
YARMOUTH	COAST	7			SYMONDS WHARF
YEOVIL	INLAND	5			COTTONS WHARF



DESTINATIONS OF SHIPS AND BARGES FROM LONDON WHARFS - 1793  
From Universal British Directory (1793).

APPENDIX 4 Page 16.

DESTINATION	LOCALE	NO OF SHIPS	RIVER OR CANAL NAME	CANAL OR RIVER CONNECTION	LONDON WHARF
YEOVIL	INLAND	4			HAWLEYS WHARF
YEOVIL	INLAND	2			HAYES WHARF
YEOVIL	INLAND	5			TOPPINGS WHARF
YORK	RIVER	6	OUSE (YORKS)		CUSTOM HOUSE QUAY
YORK	RIVER	1	OUSE (YORKS)		GRIFFINS WHARF
YORK	RIVER	5	OUSE (YORKS)		GUN & SHOT WHARF
YORK	RIVER	5	OUSE (YORKS)		SMART & DICE QUAY
YOXFORD	INLAND	2			HARRISONS WHARF
YOXFORD	INLAND	4			SMART & DICE QUAY



TOWN	1820's	1830's	1840's	1850's	1860's	1870's	TOTAL	% TOTAL
BEWDLEY	2	17	9	5	10	2	45	0.7
BIRMINGHAM	249	570	177	109	90	201	1396	20.6
BISHOPS CASTLE	4	15	8	10	8	1	46	0.7
BREWOD	2	1	0	3	4	7	17	0.3
BRIDGNORTH	1	8	9	8	14	1	41	0.6
BROMSGROVE	9	12	13	9	17	22	82	1.2
BROMYARD	10	20	2	8	11	12	63	0.9
BROSELEY/IRONBRIDGE	3	12	12	5	2	1	35	0.5
CHESTER	39	78	48	82	29	46	322	4.8
CLEOBURY MORTIMER	0	8	6	2	7	3	26	0.4
CLUN	0	0	3	4	4	2	13	0.2
DRAYTON	3	16	15	8	3	0	45	0.7
DROITWICH	2	4	10	4	1	2	23	0.3
DUDLEY	1	18	9	4	4	2	38	0.6
ECCLESHALL	5	9	5	3	1	1	24	0.4
ELLESMERE	4	12	5	1	3	0	25	0.4
HALESOWEN	8	29	16	4	2	0	59	0.9
HEREFORD	12	39	15	51	71	76	264	3.9
KIDDERMINSTER	10	31	16	14	19	5	95	1.4
KINGTON	3	17	2	16	16	13	67	1.0
KNIGHTON	0	4	7	4	2	0	17	0.3



TOWN	1820's	1830's	1840's	1850's	1860's	1870's	TOTAL	% TOTAL
LEOMINSTER	6	36	13	24	14	42	135	2.0
LLANFAIR	0	8	6	6	4	3	27	0.4
LLANFYLLIN	0	3	3	3	8	1	18	0.3
LLANGOLLEN	0	26	14	16	17	1	74	1.1
LUDLOW	6	42	33	21	12	22	136	2.0
MALPAS	0	0	0	5	1	9	15	0.2
MONTGOMERY	1	7	10	6	7	1	32	0.5
NANTWICH	8	13	15	24	0	4	64	0.9
NEWCASTLE	22	31	5	7	4	0	69	1.0
NEWPORT	8	27	10	3	0	0	48	0.7
NEWTOWN	3	24	15	19	29	2	92	1.4
OSWESTRY	3	14	16	26	55	35	149	2.2
PEMBRIDGE	0	1	0	4	5	7	17	0.3
PENKRIDGE	2	6	2	2	2	2	16	0.2
PRESTEIGN	0	2	5	3	2	1	13	0.2
RADNOR	0	1	4	4	3	0	12	0.2
RUGELEY	8	12	11	3	2	5	41	0.6
SANDBACH	4	11	6	7	3	2	33	0.5
SHIFNAL	3	19	12	16	0	0	50	0.7
SHREWSBURY	35	139	169	97	164	73	677	10.0
STAFFORD	19	31	8	25	13	15	111	1.6



TOWN	1820's	1830's	1840's	1850's	1860's	1870's	TOTAL	% TOTAL
STOKE ON TRENT	9	33	37	9	3	0	91	1.3
STONE	2	10	6	5	4	3	30	0.4
STOURBRIDGE	41	38	20	7	5	5	116	1.7
STOURPORT	0	0	1	0	2	4	7	0.1
STRETTON	0	12	7	3	7	3	32	0.5
TARPORLEY	0	7	5	7	4	3	26	0.4
TENBURY	2	7	6	9	11	7	42	0.6
WALSALL	13	36	10	18	8	9	94	1.4
WELLINGTON	1	25	15	2	0	0	43	0.6
WELSHPOOL	0	23	18	19	25	1	86	1.3
WEM	3	7	4	3	6	0	23	0.3
WENLOCK	1	9	8	5	4	7	34	0.5
WEOBLEY	0	2	0	1	2	2	7	0.1
WHITCHURCH	5	17	11	6	9	3	51	0.8
WOLVERHAMPTON	58	92	59	57	68	69	403	6.0
WORCESTER	69	212	123	84	273	203	964	14.2
WREXHAM	6	29	10	8	16	80	149	2.2
TOTAL TOWNS LISTED	705	1932	1084	918	1110	1021	6770	100
% OF TOTAL	98	96	97	92	96	93	95	
OVERALL TOTAL	721	2004	1121	1001	1157	1098	7102	



TOWNS IN THE	TOWN'S	NO OF	JOURNEYS	JOURNEY	JOURNEY	JOURNEY	JOURNEY NOT	%	NOTES ON SERVICES OVER
SHROPSHIRE AREA	MARKET	JOURNEYS	FROM TOWN	FROM ON	FROM ON	FROM ON	COINCIDING		THREE PER WEEK ETC
	DAY	IS PER WEEK	OVER 3	1st MKT	%	2nd MKT	%	3rd MKT	%
		& UNDER	PER WEEK	DAY		DAY		DAY	MARKET DAY
BENDLEY	SAT	1	NO	1	100				
BIRMINGHAM	THURS/SAT/MON	76	YES	46	61	15	20	11	14
BISHOPS CASTLE	FRI								
BREWOD	{NO MKT}								
BRIDGNORTH	SAT	3	NO	3	100				
BROMSGROVE	TUES	10	NO	9	90			1	10
BROMYARD	MON	2	NO	2	100				
BROSELEY	WED								
CHESTER	SAT/WED	30	YES	15	50	9	30	6	20
CLEOBURY MORTIMER	THURS								DAILY TO TARVIN
CLUN	TUES		YES						
DRAYTON (MARKET)	WED		YES						DAILY TO CRAVEN ARMS RAIL STATION
DROITWICH	FRI		YES						DAILY TO HODNET
DUDLEY	SAT								
ECCLESHALL	FRI								
ELLESMERE	TUES								
HALESOWEN	SAT (LIMITED)								



TOWNS IN THE	TOWN'S	NO OF	JOURNEYS	JOURNEY	JOURNEY	JOURNEY	JOURNEY NOT	NOTES ON SERVICES OVER
SHROPSHIRE AREA	MARKET	JOURNEYS	FROM TOWN	FROM ON	FROM ON	FROM ON	COINCIDING	THREE PER WEEK ETC
	DAY	3 PER WEEK	OVER 3	1st MKT	2nd MKT	3rd MKT	WITH A	
		& UNDER	PER WEEK	DAY	DAY	DAY	MARKET DAY	
HEREFORD	SAT/WED	51	NO	27	53	47		VANS USED ON SOME ROUTES
RIDDERMINSTER	THURS	3	NO	3	100			
KINGTON	TUES	6	NO	4	67		2	33
KNIGHTON	THURS							
LEOMINSTER	FRI	5	NO	4	80		1	20
LLANPAIR	SAT							
LLANFYLLIN	THURS							
LLANGOLLEN	SAT							
LUDLOW	MON\SAT	22	NO	13	59	6	3	14
MALPAS	WED							
MONTGOMERY	THURS		YES					DAILY MONTGOMERY RAIL STATION
NANTWICH	SAT							
NEWCASTLE UNDER LYME	MON\SAT							
NEWPORT	SAT							
NEWTOWN	TUES\SAT	1	NO	1	100			
OSWESTRY	WED\SAT	25	NO	19	76	5	1	4
PENKRIDGE	(NO MARKET)							SOME WITH PASSENGERS
PRESTEIGN	SAT		YES					DAILY TO TITLEY RAIL STATION
RADNOR	(NO MARKET)							
RUGELEY	THURS							
SANDBACH	THURS							
SHIPHAL	TUES							
SHEWSBURY	SAT/WED	74	YES	51	69	21	2	3
STAFFORD	SAT	7	NO	6	86		1	14
								DAILY TO PONTESBURY



TOWNS IN THE SHROPSHIRE AREA	TOWN'S MARKET DAY	NO OF JOURNEYS FROM TOWN OVER 3 & UNDER PER WEEK	JOURNEYS FROM TOWN OVER 3 PER WEEK	JOURNEY FROM ON 1st MKT DAY	JOURNEY FROM ON 2nd MKT DAY	JOURNEY FROM ON 3rd MKT DAY	JOURNEY NOT COINCIDING WITH A MARKET DAY	%	NOTES ON SERVICES OVER THREE PER WEEK ETC
STONE	TUES								
STOURBRIDGE	FRI/SAT		YES						DAILY TO ENVILLE
STOURPORT	WED/SAT								
STRETTON (CHURCH)	THURS								
TARPORELY	THURS								
TENBURY	TUES	3	NO	3	100				
WALSALL	TUES								
WELLINGTON	THURS								
WELSHPOOL	MON/SAT								
WEN	THURS								
WENLOCK (MUCH)	MON	6	NO	6	100				
WEOBLEY	THURS								
WHITCHURCH	FRI								
WOLVERHAMPTON	WED	53	YES	30	57	21	40	2	4
WORCESTER	SAT/WED	102	YES	65	64	33	32	4	4
WREYHAM	THURS/SAT	20	NO	9	45	7	35	4	20
									DAILY TO BLACK COUNTRY
									DAILY TO MALVERN & OMNIBUS SERVICES
NUMBER OF ENTRIES		20		20	9	1		12	
TOTALS & %		500		317	63	141	28	31	6
NOTES:									
34 TOWNS HAD NO CARRIERS LISTED IN THIS PERIOD	9 TOWNS 16% HAD AN EXCESS OF 3 JOURNEYS PER WEEK								



APPENDIX 7

Page 1.

LIST OF TRADES AND OCCUPATIONS FROM DIRECTORIES USED IN  
FUNCTIONAL ANALYSIS AND THE GROUP TO WHICH THEY WERE APPLIED.

TRADE OR OCCUPATION

TRADE GROUPING

ACCOUNTANT  
AGENT  
AGRICULTURAL MACHINE MAKER  
AGRICULTURAL MERCHANT  
ALE MERCHANT  
ANIMAL DOCTOR  
ARCHITECT  
ARTIST  
ATTORNEY  
AUCTIONEER  
BAKER  
BANKER  
BAROMETER MAKER  
BARRISTER  
BASKET MAKER  
BEER SELLER  
BEERHOUSE  
BELL HANGER  
BERLIN WOOL  
BLACKSMITH  
BOOKSELLER  
BOOT MAKER  
BRASS FOUNDRY  
BRAZIER  
BREECHES MAKER  
BREWER  
BRICK MAKER  
BRICKLAYER  
BRUSH MAKER  
BUILDER  
BUILDING SOCIETY  
BUTCHER  
CABINET MAKER  
CARPENTER  
CARVER  
CATTLE DEALER  
CEMENT MAKER  
CHAIN MAKER  
CHARCOAL MERCHANT  
CHEESEMONGER  
CHEMIST  
CHINA  
CHINA MANUFACTURE  
CIDER MERCHANT  
CLOCK MAKER  
CLOG MAKER  
CLOTHES DEALER  
COACH BUILDER  
COACH PAINTER  
COAL MERCHANT  
COFFEE HOUSE  
COMB MAKER

ACCOUNTANT  
AGENT  
MILLWRIGHT  
AGRICULTURAL MERCHANT  
BREWER  
VETERINARY SURGEON  
SURVEYOR  
ARTIST  
SOLICITOR  
AUCTIONEER  
BAKER  
ACCOUNTANT  
TOY SELLER  
SOLICITOR  
BASKET MAKER  
INN KEEPER  
INN KEEPER  
BLACKSMITH  
DRAPER  
BLACKSMITH  
PRINTER  
SHOE MAKER  
BRAZIER  
BRAZIER  
CLOTHES  
BREWER  
BRICK MAKER  
BUILDER  
BASKET MAKER  
BUILDER  
ACCOUNTANT  
BUTCHER  
FURNITURE  
BUILDER  
FURNITURE  
CATTLE DEALER  
LIME BURNER  
NAIL MAKER  
COAL MERCHANT  
GROCER  
CHEMIST  
CHINA  
BRICK MAKER  
BREWER  
WATCH MAKER  
SHOE MAKER  
CLOTHES  
COACH BUILDER  
COACH BUILDER  
COAL MERCHANT  
RESTAURANT  
COMB MAKER



APPENDIX 7

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LIST OF TRADES AND OCCUPATIONS FROM DIRECTORIES USED IN  
FUNCTIONAL ANALYSIS AND THE GROUP TO WHICH THEY WERE APPLIED.

TRADE OR OCCUPATION	TRADE GROUPING
CONFECTIONER	BAKER
COOPER	COOPER
CORK CUTTER	COMB MAKER
CORN DEALER	AGRICULTURAL MERCHANT
COW LEECH	VETERINARY SURGEON
CURRIER	TANNER
CUTLER	SILVERSMITH
DAIRYMAN	GROCER
DISPENSARY	CHEMIST
DRAPER	DRAPER
DRESS MAKER	CLOTHES
DRUGGIST	CHEMIST
EARTHENWARE DEALER	CHINA
ENGINEER	MILLWRIGHT
ENGRAVER	ARTIST
FANCY WARE	TOY SELLER
FARRIER	BLACKSMITH
FELLMONGER	TANNER
FERTILISER MERCHANT	AGRICULTURAL MERCHANT
FIRE AGENT	AGENT
FISHING TACKLE MAKER	COMB MAKER
FISHMONGER	FISHMONGER
FLAX DRESSER	ROPE MAKER
FLOUR DEALER	BAKER
FRUITERER	FISHMONGER
FURNITURE	FURNITURE
GAME DEALER	BUTCHER
GAS FITTER	BRAZIER
GLASS DEALER	CHINA
GLAZIER	PAINTER
GLOVER	CLOTHES
GREENGROCER	FISHMONGER
GROCER	GROCER
GUN MAKER	GUN MAKER
GUNPOWDER/CARTRIDGES	GUN MAKER
HABERDASHER	CLOTHES
HAIR DRESSER	HAIR DRESSER
HAIR SEAT MAKER	FURNITURE
HARDWARE SELLER	IRONMONGER
HARNESS MAKER	SADDLER
HATTER	CLOTHES
HIGGLER	CATTLE DEALER
HOP DEALER	AGRICULTURAL MERCHANT
HOSIER	CLOTHES
INN KEEPER	INN KEEPER
INSURANCE AGENT	AGENT
IRONMONGER	IRONMONGER
JEWELLER	SILVERSMITH
JOINER	BUILDER
LAND AGENT	SURVEYOR
LAST MAKER	SHOE MAKER
LEATHER DEALER	TANNER



APPENDIX 7

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LIST OF TRADES AND OCCUPATIONS FROM DIRECTORIES USED IN  
FUNCTIONAL ANALYSIS AND THE GROUP TO WHICH THEY WERE APPLIED.

TRADE OR OCCUPATION

TRADE GROUPING

LIME BURNER  
LIME MERCHANT  
LINEN SELLER  
LIQUOR MERCHANT  
LIVESTOCK DEALERS  
LOCKSMITH  
LOOKING GLASS MAKER  
MALTSTER  
MANURE MERCHANT  
MARINE STORES  
MASON  
MERCER  
MILLER  
MILLINER  
MILLWRIGHT  
MONUMENTAL MASON  
MUSICIAN  
NAIL MAKER  
NET MAKER  
NEWSPAPER  
OPTICIAN  
OUTFITTER  
PAINTER  
PAINTER [ART]  
PAPER DEALER  
PAPER HANGER  
PAPER MAKER  
PAWNBROKER  
PERFUMER  
PERUKE MAKER  
PHOTOGRAPHER  
PHYSICIAN  
PIG DEALER  
PLASTERER  
PLUMBER  
PORTER MERCHANT  
POULTRY DEALER  
PRINTER  
PROVISION DEALER  
PUBLIC HOUSE  
PUMP MAKER  
RESTAURANT  
ROPE MAKER  
SACK MAKER  
SADDLER  
SALT MERCHANT  
SEEDSMAN  
SHOE MAKER  
SHOPKEEPER  
SIEVE MAKER  
SILK MERCER  
SILVERSMITH

LIME BURNER  
AGRICULTURAL MERCHANT  
DRAPER  
WINE MERCHANT  
CATTLE DEALER  
BRAZIER  
TOY SELLER  
MALTSTER  
AGRICULTURAL MERCHANT  
IRONMONGER  
BUILDER  
DRAPER  
MILLER  
CLOTHES  
MILLWRIGHT  
UNDERTAKER  
ARTIST  
NAIL MAKER  
ROPE MAKER  
PRINTER  
SURGEON  
CLOTHES  
PAINTER  
ARTIST  
PAPER MAKER  
PAINTER  
PAPER MAKER  
PAWNBROKER  
HAIR DRESSER  
HAIR DRESSER  
ARTIST  
SURGEON  
CATTLE DEALER  
BUILDER  
PAINTER  
BREWER  
BUTCHER  
PRINTER  
GROCER  
INN KEEPER  
MILLWRIGHT  
RESTAURANT  
ROPE MAKER  
ROPE MAKER  
SADDLER  
COAL MERCHANT  
AGRICULTURAL MERCHANT  
SHOE MAKER  
GROCER  
BASKET MAKER  
DRAPER  
SILVERSMITH



APPENDIX 7

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LIST OF TRADES AND OCCUPATIONS FROM DIRECTORIES USED IN  
FUNCTIONAL ANALYSIS AND THE GROUP TO WHICH THEY WERE APPLIED.

TRADE OR OCCUPATION

TRADE GROUPING

SKINNER	TANNER
SLATER	BUILDER
SMALLWARE DEALER	TOY SELLER
SODA WATER MAKER	BREWER
SOLICITOR	SOLICITOR
SPIRIT MERCHANT	WINE MERCHANT
STATIONER	PRINTER
STAY MAKER	CLOTHES
STOCKING MAKER	CLOTHES
STRAW HAT MAKER	CLOTHES
SURGEON	SURGEON
SURVEYOR	SURVEYOR
TAILOR	CLOTHES
TALLOW CHANDLER	IRONMONGER
TANNER	TANNER
TAVERN	INN KEEPER
TAXIDERMIST	ARTIST
TEA DEALER	GROCER
TEA SHOP	RESTAURANT
TEMPERANCE HOUSE	RESTAURANT
THATCHER	BUILDER
THRASHING MACHINE	MILLWRIGHT
TILE MANUFACTURE	BRICK MAKER
TIMBER DEALER	TIMBER MERCHANT
TIMBER MERCHANT	TIMBER MERCHANT
TINMAN	BRAZIER
TOBACCO PIPE MAKER	TOBACCONIST
TOBACCONIST	TOBACCONIST
TOOL MAKER	MILLWRIGHT
TOY SELLER	TOY SELLER
TRUNK MAKER	COMB MAKER
TURNER [WOOD]	FURNITURE
UMBRELLA MAKER	COMB MAKER
UNDERTAKER	UNDERTAKER
UPHOLSTERER	FURNITURE
VETERINARY SURGEON	VETERINARY SURGEON
VICTUALLER	INN KEEPER
WATCH MAKER	WATCH MAKER
WELL SINKER	MILLWRIGHT
WHEELWRIGHT	WHEELWRIGHT
WHITESMITH	BLACKSMITH
WIG MAKER	HAIR DRESSER
WINE MERCHANT	WINE MERCHANT
WOOL MERCHANT	WOOL MERCHANT
WOOL STAPLER	WOOL MERCHANT
WOOLLEN SELLER	DRAPER



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LIST OF TRADE GROUPINGS USED IN FUNCTIONAL ANALYSIS AND THE  
OCCUPATIONS USED WITHIN THE GROUP.

TRADE OR OCCUPATION

TRADE GROUPING

ACCOUNTANT  
BANKER  
BUILDING SOCIETY  
AGENT  
FIRE AGENT  
INSURANCE AGENT  
AGRICULTURAL MERCHANT  
CORN DEALER  
FERTILISER MERCHANT  
HOP DEALER  
LIME MERCHANT  
MANURE MERCHANT  
SEEDSMAN  
ARTIST  
ENGRAVER  
MUSICIAN  
PAINTER [ART]  
PHOTOGRAPHER  
TAXIDERMIST  
AUCTIONEER  
BAKER  
CONFECTIONER  
FLOUR DEALER  
BASKET MAKER  
BRUSH MAKER  
SIEVE MAKER  
BELL HANGER  
BLACKSMITH  
FARRIER  
WHITESMITH  
BRASS FOUNDRY  
BRAZIER  
GAS FITTER  
LOCKSMITH  
TINMAN  
ALE MERCHANT  
BREWER  
CIDER MERCHANT  
PORTER MERCHANT  
SODA WATER MAKER  
BRICK MAKER  
CHINA MANUFACTURE  
TILE MANUFACTURE  
BRICKLAYER  
BUILDER  
CARPENTER  
JOINER  
MASON  
PLASTERER  
SLATER  
THATCHER  
BUTCHER

ACCOUNTANT  
ACCOUNTANT  
ACCOUNTANT  
AGENT  
AGENT  
AGENT  
AGRICULTURAL MERCHANT  
AGRICULTURAL MERCHANT  
AGRICULTURAL MERCHANT  
AGRICULTURAL MERCHANT  
AGRICULTURAL MERCHANT  
AGRICULTURAL MERCHANT  
AGRICULTURAL MERCHANT  
ARTIST  
ARTIST  
ARTIST  
ARTIST  
ARTIST  
ARTIST  
AUCTIONEER  
BAKER  
BAKER  
BAKER  
BASKET MAKER  
BASKET MAKER  
BASKET MAKER  
BLACKSMITH  
BLACKSMITH  
BLACKSMITH  
BLACKSMITH  
BRAZIER  
BRAZIER  
BRAZIER  
BRAZIER  
BRAZIER  
BRAZIER  
BREWER  
BREWER  
BREWER  
BREWER  
BREWER  
BRICK MAKER  
BRICK MAKER  
BRICK MAKER  
BUILDER  
BUILDER  
BUILDER  
BUILDER  
BUILDER  
BUILDER  
BUILDER  
BUTCHER



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LIST OF TRADE GROUPINGS USED IN FUNCTIONAL ANALYSIS AND THE  
OCCUPATIONS USED WITHIN THE GROUP.

TRADE OR OCCUPATION	TRADE GROUPING
GAME DEALER	BUTCHER
POULTRY DEALER	BUTCHER
CATTLE DEALER	CATTLE DEALER
HIGGLER	CATTLE DEALER
LIVESTOCK DEALERS	CATTLE DEALER
PIG DEALER	CATTLE DEALER
CHEMIST	CHEMIST
DISPENSARY	CHEMIST
DRUGGIST	CHEMIST
CHINA	CHINA
EARTHENWARE DEALER	CHINA
GLASS DEALER	CHINA
BREECHES MAKER	CLOTHES
CLOTHES DEALER	CLOTHES
DRESS MAKER	CLOTHES
GLOVER	CLOTHES
HABERDASHER	CLOTHES
HATTER	CLOTHES
HOSIER	CLOTHES
MILLINER	CLOTHES
OUTFITTER	CLOTHES
STAY MAKER	CLOTHES
STOCKING MAKER	CLOTHES
STRAW HAT MAKER	CLOTHES
TAILOR	CLOTHES
COACH BUILDER	COACH BUILDER
COACH PAINTER	COACH BUILDER
CHARCOAL MERCHANT	COAL MERCHANT
COAL MERCHANT	COAL MERCHANT
SALT MERCHANT	COAL MERCHANT
COMB MAKER	COMB MAKER
CORK CUTTER	COMB MAKER
FISHING TACKLE MAKER	COMB MAKER
TRUNK MAKER	COMB MAKER
UMBRELLA MAKER	COMB MAKER
COOPER	COOPER
BERLIN WOOL	DRAPER
DRAPER	DRAPER
LINEN SELLER	DRAPER
MERCER	DRAPER
SILK MERCER	DRAPER
WOOLLEN SELLER	DRAPER
FISHMONGER	FISHMONGER
FRUITERER	FISHMONGER
GREENGROCER	FURNITURE
CABINET MAKER	FURNITURE
CARVER	FURNITURE
FURNITURE	FURNITURE
HAIR SEAT MAKER	FURNITURE
TURNER [WOOD]	FURNITURE
UPHOLSTERER	FURNITURE
CHEESEMONGER	GROCER



APPENDIX 8

Page 3.

LIST OF TRADE GROUPINGS USED IN FUNCTIONAL ANALYSIS AND THE  
OCCUPATIONS USED WITHIN THE GROUP.

TRADE OR OCCUPATION	TRADE GROUPING
DAIRYMAN	GROCER
GROCER	GROCER
PROVISION DEALER	GROCER
SHOPKEEPER	GROCER
TEA DEALER	GROCER
GUN MAKER	GUN MAKER
GUNPOWDER/CARTRIDGES	GUN MAKER
HAIR DRESSER	HAIR DRESSER
PERFUMER	HAIR DRESSER
PERUKE MAKER	HAIR DRESSER
WIG MAKER	HAIR DRESSER
BEER SELLER	INN KEEPER
BEERHOUSE	INN KEEPER
INN KEEPER	INN KEEPER
PUBLIC HOUSE	INN KEEPER
TAVERN	INN KEEPER
VICTUALLER	INN KEEPER
HARDWARE SELLER	IRONMONGER
IRONMONGER	IRONMONGER
MARINE STORES	IRONMONGER
TALLOW CHANDLER	IRONMONGER
CEMENT MAKER	LIME BURNER
LIME BURNER	LIME BURNER
MALTSTER	MALTSTER
MILLER	MILLER
AGRICULTURAL MACHINE MAKER	MILLWRIGHT
ENGINEER	MILLWRIGHT
MILLWRIGHT	MILLWRIGHT
PUMP MAKER	MILLWRIGHT
THRASHING MACHINE	MILLWRIGHT
TOOL MAKER	MILLWRIGHT
WELL SINKER	MILLWRIGHT
CHAIN MAKER	NAIL MAKER
NAIL MAKER	NAIL MAKER
GLAZIER	PAINTER
PAINTER	PAINTER
PAPER HANGER	PAINTER
PLUMBER	PAINTER
PAPER DEALER	PAPER MAKER
PAPER MAKER	PAPER MAKER
PAWNBROKER	PAWNBROKER
BOOKSELLER	PRINTER
NEWSPAPER	PRINTER
PRINTER	PRINTER
STATIONER	PRINTER
COFFEE HOUSE	RESTAURANT
RESTAURANT	RESTAURANT
TEA SHOP	RESTAURANT
TEMPERANCE HOUSE	RESTAURANT
FLAX DRESSER	ROPE MAKER
NET MAKER	ROPE MAKER
ROPE MAKER	ROPE MAKER



APPENDIX 8

Page 4.

LIST OF TRADE GROUPINGS USED IN FUNCTIONAL ANALYSIS AND THE  
OCCUPATIONS USED WITHIN THE GROUP.

TRADE OR OCCUPATION

TRADE GROUPING

SACK MAKER	ROPE MAKER
HARNESS MAKER	SADDLER
SADDLER	SADDLER
BOOT MAKER	SHOE MAKER
CLOG MAKER	SHOE MAKER
LAST MAKER	SHOE MAKER
SHOE MAKER	SHOE MAKER
CUTLER	SILVERSMITH
JEWELLER	SILVERSMITH
SILVERSMITH	SILVERSMITH
ATTORNEY	SOLICITOR
BARRISTER	SOLICITOR
SOLICITOR	SOLICITOR
OPTICIAN	SURGEON
PHYSICIAN	SURGEON
SURGEON	SURGEON
ARCHITECT	SURVEYOR
LAND AGENT	SURVEYOR
SURVEYOR	SURVEYOR
CURRIER	TANNER
FELLMONGER	TANNER
LEATHER DEALER	TANNER
SKINNER	TANNER
TANNER	TANNER
TIMBER DEALER	TIMBER MERCHANT
TIMBER MERCHANT	TIMBER MERCHANT
TOBACCO PIPE MAKER	TOBACCONIST
TOBACCONIST	TOBACCONIST
BAROMETER MAKER	TOY SELLER
FANCY WARE	TOY SELLER
LOOKING GLASS MAKER	TOY SELLER
SMALLWARE DEALER	TOY SELLER
TOY SELLER	TOY SELLER
MONUMENTAL MASON	UNDERTAKER
UNDERTAKER	UNDERTAKER
ANIMAL DOCTOR	VETERINARY SURGEON
COW LEECH	VETERINARY SURGEON
VETERINARY SURGEON	VETERINARY SURGEON
CLOCK MAKER	WATCH MAKER
WATCH MAKER	WATCH MAKER
WHEELWRIGHT	WHEELWRIGHT
LIQUOR MERCHANT	WINE MERCHANT
SPIRIT MERCHANT	WINE MERCHANT
WINE MERCHANT	WINE MERCHANT
WOOL MERCHANT	WOOL MERCHANT
WOOL STAPLER	WOOL MERCHANT



NUMBER OF DIRECTIONAL ROUTES FROM SHROPSHIRE TOWNS PER TYPE OF TRANSPORT PER YEAR

TYPE OF TRANSPORT	IRON' BGE										WENLOCK WHIT'CH O'GATES DAWLEY			
	BISH' C BRID'TH	BROSL'Y	CLEOB'Y	CLUN	DRAYTON	ELLE'RE	LUDLOW	NEWP'RT	OSWE'RY	SHIFNAL	SHRE'BY	STRET'N	WELL'TN	WEM
RAILWAY MAIN LINE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RAILWAY OTHER LINE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WATERWAY	0	2	2	0	0	2	0	0	2	0	2	1	0	2
CARRIER NATIONAL	3	1	2	0	1	1	4	0	0	2	5	1	0	3
CARRIER MIDDLING	1	0	0	0	2	2	2	6	2	0	11	0	1	2
COACH NATIONAL	2	3	1	0	0	2	3	2	3	2	8	2	2	4
COACH MIDDLING	2	0	0	0	0	0	0	0	0	0	2	0	0	0
1835														
RAILWAY MAIN LINE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RAILWAY OTHER LINE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WATERWAY	0	2	2	0	2	2	0	2	2	0	3	2	1	2
CARRIER NATIONAL	0	2	1	0	2	1	4	0	0	2	3	2	0	0
CARRIER MIDDLING	3	1	2	0	5	2	6	4	4	0	13	2	4	4
COACH NATIONAL	2	2	3	0	2	2	3	4	4	2	8	2	3	3
COACH MIDDLING	0	1	0	0	2	0	0	0	0	0	2	0	0	0
1842														
RAILWAY MAIN LINE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RAILWAY OTHER LINE	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WATERWAY	0	2	2	0	2	2	0	2	2	0	3	2	1	2
CARRIER NATIONAL	1	2	2	1	1	0	2	0	0	0	3	2	0	2
CARRIER MIDDLING	1	1	2	2	2	2	8	5	4	2	8	2	2	2
COACH NATIONAL	0	2	2	0	2	2	4	0	4	2	6	2	2	0
COACH MIDDLING	0	1	1	0	0	0	1	2	0	2	2	1	0	1



NUMBER OF DIRECTIONAL ROUTES FROM SHROPSHIRE TOWNS PER TYPE OF TRANSPORT PER YEAR

IRON'BGE																			
TYPE OF TRANSPORT	BISH' C	BRID'TH	BROSL'Y	CLEOB'Y	CLUN	DRAYTON	ELLE'RE	LUDLOW	NEWP'RT	OSWE'RY	SHIFNAL	SHRE'BY	STRET'N	WELL'TN	WEM	WENLOCK	WHIT'CH	O'GATES	DANLEY
RAILWAY MAIN LINE	0	0	0	0	0	0	0	0	0	2	2	2	0	0	0	0	0	2	0
RAILWAY OTHER LINE	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
WATERWAY	0	2	2	0	0	2	2	0	2	2	0	3	0	2	1	0	2		
CARRIER NATIONAL	0	2	2	0	0	0	0	2	0	0	1	1	0	1	0	0	0		
CARRIER MIDDLING	4	4	3	2	2	4	0	7	3	5	2	11	2	0	2	4	4		
COACH NATIONAL	0	3	2	2	0	2	0	3	0	0	0	4	2	0	0	0	0		
COACH MIDDLING	0	1	2	0	0	0	1	2	0	1	3	2	0	0	1	1	2		

1856

RAILWAY MAIN LINE	0	0	0	0	0	0	0	2	0	2	2	4	2	2	0	2	0	2	0	0
RAILWAY OTHER LINE	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0
WATERWAY	0	2	2	2	0	2	2	0	2	2	0	3	0	1	0	2	0	2	0	0
CARRIER NATIONAL	0	0	1	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0
CARRIER MIDDLING	3	4	1	2	1	2	2	2	0	3	0	6	4	2	2	3	2	3	0	0
COACH NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COACH MIDDLING	1	5	2	0	0	2	1	3	0	2	3	3	0	0	1	0	1	0	0	0

1870

RAILWAY MAIN LINE	0	0	0	0	0	0	0	2	0	2	2	4	2	2	0	2	2	2	0	0
RAILWAY OTHER LINE	1	2	1	2	0	3	2	0	2	1	0	4	0	0	2	1	0	0	1	1
WATERWAY	0	2	2	0	0	2	2	0	2	2	0	3	0	1	0	2	2	0	0	0
CARRIER NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CARRIER MIDDLING	1	1	1	2	1	0	0	2	0	3	0	6	1	0	0	3	0	3	0	0
COACH NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COACH MIDDLING	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



PENDIX 10

WEIGHTED DIRECTIONAL ROUTES FROM SHROPSHIRE TOWNS PER TYPE OF TRANSPORT PER YEAR CREATING A FUNCTIONAL INDEX (SEE TEXT FOR WEIGHTING USED) - PAGE 1

TYPE OF TRANSPORT	BISH' C BRID'TH BROSL'Y CLEOB'Y CLUN DRAYTON ELLE'RE LUDLOW NEWP'RT OSWE'RY SHIPNAL SHRE'BY STRET'N WELL'TN WEM WENLOCK WHIT'CH O'GATES DAWLEY									
	IRON'BGE									
RAILWAY MAIN LINE	0	0	0	0	0	0	0	0	0	0
RAILWAY OTHER LINE	0	0	0	0	0	0	0	0	0	0
WATERWAY	0	6	6	0	0	6	0	3	0	0
CARRIER NATIONAL	9	3	6	0	3	12	0	3	0	0
CARRIER MIDDLING	1	0	0	2	2	2	0	0	1	0
COACH NATIONAL	6	9	3	0	6	9	6	6	9	0
COACH MIDDLING	2	0	0	0	0	0	0	0	0	0

1835

RAILWAY MAIN LINE	0	0	0	0	0	0	0	0	0	0
RAILWAY OTHER LINE	0	0	0	0	0	0	0	0	0	0
WATERWAY	0	6	6	0	6	6	0	6	3	0
CARRIER NATIONAL	0	6	3	0	6	12	0	6	0	0
CARRIER MIDDLING	3	1	2	0	5	6	4	4	2	0
COACH NATIONAL	6	6	9	6	6	12	12	6	6	0
COACH MIDDLING	0	1	0	0	2	0	0	0	0	0

1842

RAILWAY MAIN LINE	0	0	0	0	0	0	0	0	0	0
RAILWAY OTHER LINE	0	0	0	0	0	0	0	0	0	0
WATERWAY	0	6	6	0	6	6	0	6	3	0
CARRIER NATIONAL	3	6	6	0	3	6	0	6	0	0
CARRIER MIDDLING	1	1	2	1	2	8	2	2	2	0
COACH NATIONAL	0	6	6	6	0	12	6	6	0	0
COACH MIDDLING	0	1	1	0	0	1	2	1	1	1

4	20	21	7	5	17	14	27	13	22	8	21	6	21	0	3
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TYPE OF TRANSPORT	BISH' C BRID'TH	BROSL'Y CLEOB'Y	CLJUN	DRAYTON ELLE'RE	LUDLOW NEWP'RT	OSWE'RY SHIPNAL	SHRE'BY	STRET'N WELL'TN	WEM	WENLOCK	WHIT'CH	O'GATES	DAWLEY
IRON'BGE													
1850													
RAILWAY MAIN LINE	0	0	0	0	0	24	24	0	24	0	0	24	0
RAILWAY OTHER LINE	0	0	0	0	0	12	0	0	6	0	0	0	0
WATERWAY	0	6	0	6	0	6	0	0	6	3	0	6	0
CARRIER NATIONAL	0	6	0	0	6	0	3	0	3	0	0	0	0
CARRIER MIDDLING	4	4	2	4	7	3	2	2	0	2	4	0	0
COACH NATIONAL	0	9	6	6	9	0	0	6	0	0	0	0	0
COACH MIDDLING	0	1	2	0	2	0	3	0	1	1	2	0	0
1856													
RAILWAY MAIN LINE	0	0	0	0	24	0	24	24	24	0	24	24	0
RAILWAY OTHER LINE	0	0	0	0	0	12	0	0	12	0	0	0	0
WATERWAY	0	6	0	6	0	6	0	0	6	3	0	6	0
CARRIER NATIONAL	0	0	0	0	0	0	0	0	0	6	0	0	0
CARRIER MIDDLING	3	4	1	2	2	0	0	4	2	2	3	0	0
COACH NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0
COACH MIDDLING	1	5	2	2	3	0	3	0	1	0	0	0	0
1870													
RAILWAY MAIN LINE	0	0	0	0	24	0	24	24	24	0	24	24	0
RAILWAY OTHER LINE	6	12	0	18	12	12	0	0	18	0	12	0	6
WATERWAY	0	6	0	6	0	6	0	0	6	3	0	0	0
CARRIER NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0
CARRIER MIDDLING	1	1	1	0	2	0	0	1	0	0	3	0	0
COACH NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0
COACH MIDDLING	0	1	0	0	0	0	0	0	0	0	0	0	0
1870													
RAILWAY MAIN LINE	0	0	0	0	24	0	24	24	24	0	24	24	0
RAILWAY OTHER LINE	6	12	0	18	12	12	0	0	18	0	12	0	6
WATERWAY	0	6	0	6	0	6	0	0	6	3	0	0	0
CARRIER NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0
CARRIER MIDDLING	1	1	1	0	2	0	0	1	0	0	3	0	0
COACH NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0
COACH MIDDLING	0	1	0	0	0	0	0	0	0	0	0	0	0
1870													
RAILWAY MAIN LINE	0	0	0	0	24	0	24	24	24	0	24	24	0
RAILWAY OTHER LINE	6	12	0	18	12	12	0	0	18	0	12	0	6
WATERWAY	0	6	0	6	0	6	0	0	6	3	0	0	0
CARRIER NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0
CARRIER MIDDLING	1	1	1	0	2	0	0	1	0	0	3	0	0
COACH NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0
COACH MIDDLING	0	1	0	0	0	0	0	0	0	0	0	0	0
1870													
RAILWAY MAIN LINE	0	0	0	0	24	0	24	24	24	0	24	24	0
RAILWAY OTHER LINE	6	12	0	18	12	12	0	0	18	0	12	0	6
WATERWAY	0	6	0	6	0	6	0	0	6	3	0	0	0
CARRIER NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0
CARRIER MIDDLING	1	1	1	0	2	0	0	1	0	0	3	0	0
COACH NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0
COACH MIDDLING	0	1	0	0	0	0	0	0	0	0	0	0	0
1870													
RAILWAY MAIN LINE	0	0	0	0	24	0	24	24	24	0	24	24	0
RAILWAY OTHER LINE	6	12	0	18	12	12	0	0	18	0	12	0	6
WATERWAY	0	6	0	6	0	6	0	0	6	3	0	0	0
CARRIER NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0
CARRIER MIDDLING	1	1	1	0	2	0	0	1	0	0	3	0	0
COACH NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0
COACH MIDDLING	0	1	0	0	0	0	0	0	0	0	0	0	0
1870													
RAILWAY MAIN LINE	0	0	0	0	24	0	24	24	24	0	24	24	0
RAILWAY OTHER LINE	6	12	0	18	12	12	0	0	18	0	12	0	6
WATERWAY	0	6	0	6	0	6	0	0	6	3	0	0	0
CARRIER NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0
CARRIER MIDDLING	1	1	1	0	2	0	0	1	0	0	3	0	0
COACH NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0
COACH MIDDLING	0	1	0	0	0	0	0	0	0	0	0	0	0
1870													
RAILWAY MAIN LINE	0	0	0	0	24	0	24	24	24	0	24	24	0
RAILWAY OTHER LINE	6	12	0	18	12	12	0	0	18	0	12	0	6
WATERWAY	0	6	0	6	0	6	0	0	6	3	0	0	0
CARRIER NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0
CARRIER MIDDLING	1	1	1	0	2	0	0	1	0	0	3	0	0
COACH NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0
COACH MIDDLING	0	1	0	0	0	0	0	0	0	0	0	0	0
1870													
RAILWAY MAIN LINE	0	0	0	0	24	0	24	24	24	0	24	24	0
RAILWAY OTHER LINE	6	12	0	18	12	12	0	0	18	0	12	0	6
WATERWAY	0	6	0	6	0	6	0	0	6	3	0	0	0
CARRIER NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0
CARRIER MIDDLING	1	1	1	0	2	0	0	1	0	0	3	0	0
COACH NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0
COACH MIDDLING	0	1	0	0	0	0	0	0	0	0	0	0	0
1870													
RAILWAY MAIN LINE	0	0	0	0	24	0	24	24	24	0	24	24	0
RAILWAY OTHER LINE	6	12	0	18	12	12	0	0	18	0	12	0	6
WATERWAY	0	6	0	6	0	6	0	0	6	3	0	0	0
CARRIER NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0
CARRIER MIDDLING	1	1	1	0	2	0	0	1	0	0	3	0	0
COACH NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0
COACH MIDDLING	0	1	0	0	0	0	0	0	0	0	0	0	0
1870													
RAILWAY MAIN LINE	0	0	0	0	24	0	24	24	24	0	24	24	0
RAILWAY OTHER LINE	6	12	0	18	12	12	0	0	18	0	12	0	6
WATERWAY	0	6	0	6	0	6	0	0	6	3	0	0	0
CARRIER NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0
CARRIER MIDDLING	1	1	1	0	2	0	0	1	0	0	3	0	0
COACH NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0
COACH MIDDLING	0	1	0	0	0	0	0	0	0	0	0	0	0
1870													
RAILWAY MAIN LINE	0	0	0	0	24	0	24	24	24	0	24	24	0
RAILWAY OTHER LINE	6	12	0	18	12	12	0	0	18	0	12	0	6
WATERWAY	0	6	0	6	0	6	0	0	6	3	0	0	0
CARRIER NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0
CARRIER MIDDLING	1	1	1	0	2	0	0	1	0	0	3	0	0
COACH NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0
COACH MIDDLING	0	1	0	0	0	0	0	0	0	0	0	0	0
1870													
RAILWAY MAIN LINE	0	0	0	0	24	0	24	24	24	0	24	24	0
RAILWAY OTHER LINE	6	12	0	18	12	12	0	0	18	0	12	0	6
WATERWAY	0	6	0	6	0	6	0	0	6	3	0	0	0
CARRIER NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0
CARRIER MIDDLING	1	1	1	0	2	0	0	1	0	0	3	0	0
COACH NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0
COACH MIDDLING	0	1	0	0	0	0	0	0	0	0	0	0	0
1870													
RAILWAY MAIN LINE	0	0	0	0	24	0	24	24	24	0	24	24	0
RAILWAY OTHER LINE	6	12	0	18	12	12	0	0	18	0	12	0	6
WATERWAY	0	6	0	6	0	6	0	0	6	3	0	0	0
CARRIER NATIONAL	0	0	0	0	0	0	0	0	0	0	0	0	0
CARRIER MIDDLING	1	1	1	0	2	0	0	1	0	0	3	0	0
COACH NATIONAL	0	0	0	0	0	0	0						



REFERENCES AND SOURCES

TRADE DIRECTORIES USED AS PRIMARY SOURCES - IN DATE ORDER.

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