

A quantitative analysis of the social and economic structure of north
Ceredigion in 1891

by Peter Glyn Williams

'My own father was a village schoolteacher. His father was gassed in the First World War and could not, therefore, work properly thereafter. His father, my father's grandfather, remembered the evictions in West Wales of tenant farmers because they voted according to their consciences in parliamentary elections before the secret ballot Act of 1870 [*sic*] was passed. They were evicted from their homes and their farms and many of them had to emigrate.

They were back country people. They lived unremarked, though not unremarkable, lives, and I take up the noble Lord's words, of duty and service. There are millions like them in our country today. All I would say is this: "they are no petty people".'

(Gareth Wyn, Lord Williams of Mostyn, House of Lords, 15 October 1998)

Thesis submitted for the degree of Master of Philosophy in the Department of
History and Welsh History, the University of Aberystwyth

Part 1

2011

DECLARATION

This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

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STATEMENT 1

This thesis is the result of my own investigations, except where otherwise stated.

Other sources are acknowledged by footnotes giving explicit references.

A bibliography is appended in Part 2.

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SUMMARY

This thesis seeks to demonstrate that the detailed evidence available in census enumerators' returns can be used to construct a valid and robust model of the social and economic structures of communities and localities. The geographical region selected for study is the northern part of the county of Ceredigion defined by the ancient Hundreds of Genau'r Glyn and Ilar (Uchaf). It is argued that the present work provides a more comprehensive, geographically extensive and socially inclusive analysis than some previous studies. The 1891 census returns are evaluated both in terms of their utility and their recognised defects and weaknesses. Previous studies are reviewed and contrasted with the present evidence-based work. By extracting, evaluating and interpreting the data recorded for each individual subject cited in the census returns those data are used to provide an added-value analysis in the form of an intimate socio-economic study for each community. Hence, the study aims to analyse personal data and interpret that information in the context of the contemporary social framework alongside the economic pressures and agents for structural change. The indicators that are analysed include personal names, gender ratios, age distributions, places of birth and mobility, language ability and the disadvantaged in society. Particular attention is paid to occupations and employment patterns as reflected in contemporary trading, industrial and commercial structures.

ACKNOWLEDGEMENTS

I would like to thank my principal supervisor, Dr Owen G Roberts of the Department of History and Welsh History, Aberystwyth University, for his patience and courtesy in supporting this project and helping me overcome the barriers of physical distance that have been involved. Also for his loose hand on the tiller in terms of my negotiation of many unknowns and uncertainties. He has also encouraged me to challenge some aspects of the work of established historians whilst acknowledging my understandable reticence in this regard. I have also to thank Professor Roger D Price, of the same Department, for his efforts in prompting and coaxing a non-historian out of his comfort zone by pointing me towards hitherto unknown concepts and publications. Also for his insistence that a broader appreciation of historical background beyond the defined study area is not only desirable but essential. The maps defining the study area were most professionally drawn by Mr Ian Gulley of the Institute of Geography & Earth Sciences, Aberystwyth University. Miss Bethan Mair Williams produced the schematic maps showing the parishes within the registration sub-districts.

The photograph of the Borth Hydropathic Hotel is reproduced by kind permission of Archifdy Ceredigion. Mrs Pat Evans, Penrhyn-coch kindly provided the photograph of Quebec Row, Llanbadarn Fawr and Mr Mike Alexander, formerly of Llanafan, willingly gave permission to use his photograph of Cwmystwyth.

Dr Mike Benbough-Jackson of Liverpool John Moores University responded promptly and generously to my request for sources of information describing

the connection between physical features and external English cultural influences in Ceredigion.

Mr Tim Padfield, Copyright Officer, The National Archives, gave permission for the reproduction of the image from the 1891 Census Enumerators' Book for part of Pier Street, Aberystwyth. Mr Gwyndaf Williams, Publications Officer, Cymdeithas Hanes Teuloedd Gwynedd, freely provided the schedules of county and parish codes used as the basis of the study of the movement of subjects. In so doing he saved me much time and effort and enabled me to produce a more credible result. Finally, a sincere word of appreciation is due to Miss Helen Palmer and her colleagues at Archifdy Ceredigion for their patient assistance over a considerable number of years. That assistance has generally been given on topics outside scope of the present study. By providing some understanding of the strengths and weaknesses inherent in local history records that encouragement first led me to question how the under-used potential within census returns could be further developed and constructively exploited.

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Chapter 1 – Introduction to the study

1.1 Setting the scene

This dissertation describes a research project that uses personal data extracted from the UK census taken in April 1891. The objective is to use the data recorded for individual subjects to create aggregated models which might then provide an informed view of the contemporary social and economic structure of north Ceredigion. Simple, but statistically robust measures, are applied to a range of reported characteristics. This evidence-based study is designed to offer an added-value interpretation for a statistically significant population in order to radically develop and extend previously published work.

Census returns carry structured details for all subjects across all sectors of society and, in that regard, it is suggested, are a unique resource. The procedure for the conduct of the 1891 census is outlined in a later chapter. The mechanism for the collection and transcription of household-level information is described so that the potential applications for the data as well as their limitations might be appreciated. The process for the creation of the Census Enumerators' Books is explained. These handwritten Books were subsequently used to extract the statistical data required by government and the results published as summary tables in the official reports a year or so later. Government was not really concerned with the fine detail down to the level of the individual. This study seeks to capture and then exploit that

personal level of detail in order to construct a series of quantitative models covering the widest possible spread of parameters. The motivation for the study derives from a belief that the raw data present an opportunity for a 'bottom-up' analysis rather than the 'top-down' approach necessarily dictated by the planning requirements of central governments. The principal aim of the study is to demonstrate that census data, notwithstanding their recognised limitations, are capable of describing and defining the characteristics of late-Victorian communities encompassed within the study area.

The present study is compared with similar exercises undertaken for other communities and for other census dates in Ceredigion, in Meirionnydd and in coal-mining areas of Glamorgan, in the city of Winchester and in West Devon market towns in England, and in New Lanark, in Dumbarton and the Vale of Leven, and in urban Glasgow in Scotland. These previous studies are described in later chapters, especially where they have provided lessons to be learned and applied in the present study.

The geographical region selected for the study is centred on the ancient Hundreds of Genau'r Glyn and Ilar (Uchaf); an interesting and varied region of mid Wales. It includes the seaside resort towns of Aberystwyth and Borth, both benefiting from the construction of railway lines^{1.1} connecting with the English Midlands in 1864, and with the former being linked to south Wales via Carmarthen from 1866^{1.2}. The region also includes scattered farming

1.1 Baughan, P E, 1991. *A Regional History of the Railways of Great Britain. Volume XI North and Mid Wales*. Nairn: David St John Thomas Publisher, chapters 10 and 13. ISBN 0946537593

1.2 Green, C C, 1993. *The Coast Lines of the Cambrian Railways Volume 1*. Didcot: Wild Swan Publications. ISBN 1874103070

communities, estates of the minor gentry, extensive and sparsely populated uplands, and the lead mining areas of the Rheidol valley and beyond^{1.3}. This first chapter aims to describe the administrative structure and economic and commercial life of north Ceredigion towards the end of the nineteenth century, together with an overview of physical features and the pattern of settlements. In order to establish the contextual framework for the study this first chapter reviews some existing essays and published sources in preparation for more detailed consideration in later chapters.

The study area was selected on the basis of a number of factors designed to provide variation in geography from coastal to pastoral to upland, and covering a mix of communities from urban to rural but, most importantly, a statistically robust yet manageable population count. The northern and eastern limits of the area are naturally defined by the county boundary and the southern limit by the catchment area of the Afon Wyre. The main topographical features of the study area are shown in Figure 1, below.

1.2 Economic structure of the study area in the latter part of the nineteenth century

Ceredigion is a maritime county, the western flank being defined by the coast of Cardigan Bay and the northern by the Dyfi estuary. Most of the main rivers in the present study area rise in the eastern uplands; the Leri, Rheidol,

1.3 Benbough-Jackson, M, 2007. *Cardiganshire: A concise history*. Cardiff: University of Wales Press, chapter 8. ISBN 9780708321119



Figure 1 - The principal features of the study area

Ystwyth and Wyre. Benbough-Jackson^{1,4} has suggested that the upland areas inhibited land access from the east and exerted a brake on English cultural influences; this topic is further discussed in chapter seven, which considers reported language ability. Lead mining was known in the early fourteenth century but it was not until the creation of the Mines Royal Society in 1568 that systematic exploitation of metalliferous ores commenced. In addition to lead, there were deposits of copper and silver. In the seventeenth

1.4 *ibid*, 1

century^{1.5} a mint for producing silver coins was established at Aberystwyth Castle. Involvement in European wars increased demand and provided a boost to the local economy. The exploitation of mineral deposits attracted migrants from Flintshire, Derbyshire, Yorkshire and, of course, Cornwall. These incomers brought technical expertise and management skills, capital and labour. Their descendants are still to be found in the area as evidenced by, for example, family surnames such as Bonsall (Derbyshire), and Rowe and Trethewey (both Cornwall). These names are still listed in the current (ie 2010-11) Aberystwyth District phone book.

Aberystwyth was, and is, the dominant urban settlement in Ceredigion. Although not providing all the formal services normally associated with a county town it generally fulfilled that function. One exception of a function usually associated with a county town was the holding of Assizes. These were held at Cardigan before being transferred to Lampeter in 1889^{1.6}.

1.2.1 Shipping and sea trade

J G Jenkins^{1.7} draws a clear distinction between the occupations and activities of mariners and fisherman. Through the eighteenth and early nineteenth centuries Cardigan Bay was an important herring fishery. By the end of the nineteenth century this industry had declined sharply; it was suggested that

1.5 Lewis, W J, 1980. *Born on a Perilous Rock. Aberystwyth Past and Present*. Aberystwyth: Cambrian News, 4. ISBN 0900439041

1.6 Morgan, G, 2006. *Ceredigion: a Wealth of History*. Llandysul: Gomer Press, 210. ISBN 1843235013

1.7 Jenkins, J G, 1982. *The Maritime Heritage of Dyfed*. Cardiff: National Museum of Wales. ISBN 0720002680

lead pollution and the migration of the herring shoals to other feeding grounds were the underlying causes^{1.8}. In a semi-biographical note^{1.9} T A Davies records that, in 1969, he caught five hundred herring on the beach by the lifeboat station at Borth. Aberystwyth harbour was, at first, a poor affair located at the entrance to the rivers Rheidol and Ystwyth where they jointly entered Cardigan Bay. Access to the harbour was constrained by a sand bar. A new stone pier was constructed on the south side after 1836^{1.10} which greatly improved the harbour and access for shipping by channelling the flow of both rivers in order to scour away the sand bar across the entrance.

The arrival of the railway in 1864 and the decline of lead mining and related industries ended ship building at Aberystwyth but boat building and repairing continued there for many years, the last business closing in 1959^{1.11}. Ships arriving at Aberystwyth brought imports of wine and spirits, of bricks and earthenware from Buckley through Connah's Quay, slates from Caernarfon, Y Felinheli and Porthmadog, coal and culm (fine-grained anthracite waste) from Swansea and Pembrokeshire, limestone for burning in kilns (at Trefechan and other locations), timber for general building and ship repairing sourced from Canada and the Baltic ports, salt from Cheshire, and general goods from Liverpool^{1.12}. Exports from Aberystwyth included oak bark, lead ore, and agricultural produce. After the arrival of the railway, exports of lead ore

1.8 Lewis, W J, 1980. *Born on a Perilous Rock. Aberystwyth Past and Present*. Aberystwyth: Cambrian News, 92. ISBN 0900439041

1.9 Davies, T A, 2004. *Borth: A seaborne village*. Llanrwst: Gwasg Carreg Gwalch, 47. ISBN 0863818773

1.10 Lewis, W J, 1980. *Born on a Perilous Rock. Aberystwyth Past and Present*. Aberystwyth: Cambrian News, 80. ISBN 0900439041

1.11 *ibid*, 87.

1.12 Eames, A, 1984. *Machlud Hwyliau'r Cymry/The Twilight of Welsh Sail*. Cardiff: University of Wales Press, 19. ISBN 070830866X

through the port fell from 2 385 tons in 1880 to 700 tons in 1890^{1.13}. This may have had more to do with the market price of lead rather than the relative economics of rail versus sea transport from Ceredigion to smelters outside the area. There were a number of other, minor, locations along the coast where cargoes were landed from small craft. Aber-arth was, for example, in medieval times, the port for Strata Florida^{1.14}.

Between 1830 and 1870 123 vessels were built at Aberystwyth and the industry supported ancillary trades such as block making, and rope and sail making^{1.15}. Lewis states that the last schooner to be built at Aberystwyth was the *Edith Eleanor*, in 1881, constructed by J Warrell & Co for the timber trade^{1.16}. D Jenkins has an illustration of this most elegant vessel operating in the Mediterranean Sea^{1.17}. Interestingly, G I Thomas^{1.18} cites the last vessel to be built at Aberystwyth as the *Firefly* in 1886, a steamer of nineteen tons, built by Isaac Hopkins for the monks of Caldey Island; she subsequently sank in Tenby Harbour in a gale, in March 1916. The last vessel built at Borth was the *Lerry* in 1871, a smack of thirty-three tons. The small harbour there also closed with the arrival of the railway and the last trade was in 1863. The harbour was finally erased with the diversion of the Afon Leri in 1901 under a

1.13 Jenkins, J G, 1982. *The Maritime Heritage of Dyfed*. Cardiff: National Museum of Wales, 40. ISBN 0720002680

1.14 *ibid*, 42.

1.15 Lewis, C R and Wheatley, S E, 1998. The Towns of Cardiganshire, 1800-1995. In Jenkins, G H and Jones, I G, eds. *Cardiganshire County History Volume 3 Cardiganshire in Modern Times*. Cardiff: University of Wales Press, 217. ISBN 0708314899

1.16 Lewis, W J, 1980. *Born on a Perilous Rock. Aberystwyth Past and Present* Aberystwyth: Cambrian News, 86. ISBN 0900439041

1.17 Jenkins, D, 1998. Shipping and Shipbuilding. In Jenkins, G H and Jones, I G, eds. *Cardiganshire County History Volume 3 Cardiganshire in Modern Times*. Cardiff: University of Wales Press Figure 37. ISBN 0708314899

1.18 Thomas, G I, 1994. *The growth and decline of Cardiganshire shipbuilding from 1790 – 1914. Volume 1*. Thesis (MPhil) St David's University College, Lampeter

scheme to drain Cors Fochno^{1.19}.

D Jenkins^{1.20} makes the point that the coming of the railway did not precipitate a total and immediate cessation of coastal shipping citing several examples of passenger services from ports in Ceredigion which continued up to the First World War. Kelly contains a note on a service operating in 1895:

‘ . . . The steamer *Countess of Lisburne* leaves the harbour for Liverpool and Bristol every Tuesday; Isaac Griffiths, agent for goods & passengers, Rofawr . . . ’.^{1.21}

Of course, many of the men of Ceredigion who were mariners served on vessels that were engaged on routes far from the shores of West Wales. For many of these seamen their home port was not Aber-porth or Aberystwyth but London or Liverpool, but, especially, Cardiff with its dominant long-distance coal trade^{1.22}.

1.2.2 Agriculture

In 1887, according to Gerald Morgan^{1.23}, eighty per cent of farmers were tenants and the established estates were still largely intact. The most

1.19 Jenkins, J G, 1982. *The Maritime Heritage of Dyfed*. Cardiff: National Museum of Wales 43. ISBN 0720002680

1.20 Jenkins, D, 1998. Shipping and Shipbuilding. In Jenkins, G H and Jones, I G, eds. *Cardiganshire County History Volume 3 Cardiganshire in Modern Times*. Cardiff: University of Wales Press 190. ISBN 0708314899

1.21 1.6 *Kelly's Directory of South Wales 1895*. London: Kelly & Co, 62.

1.22 Jenkins, D, 1998. Shipping and Shipbuilding. In Jenkins, G H and Jones, I G, eds. *Cardiganshire County History Volume 3 Cardiganshire in Modern Times*. Cardiff: University of Wales Press, 192-193, 195-196. ISBN 0708314899

1.23 Morgan, G, 2006. *Ceredigion: a Wealth of History*. Llandysul: Gomer Press, 147. ISBN 1843235013

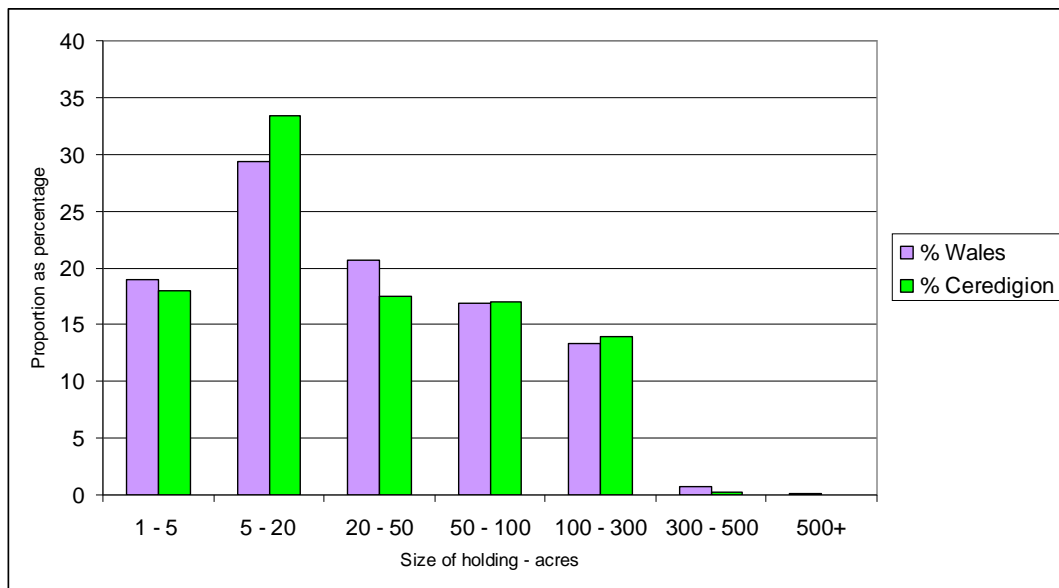


Figure 2 – Proportion (%) of agricultural holdings by size – Ceredigion and Wales in 1885^{1.31}

significant of these were Nanteos^{1.24} (Powell), Trawsgoed^{1.25} (Vaughan), Gogerddan^{1.26} (Pryse), and Aber-mâd^{1.27} (Pugh). Lesser interests included Lovesgrove^{1.28} (Evans), Allt-Ilwyd^{1.29} (Hughes) and Mabws^{1.30} (Lloyd/Begbie). However, between 1870 and 1930 the proprietors of these estates sold off large tracts of land in response to pressures resulting from changes in

1.24 Morgan, G J, 2001. *Nanteos: A Welsh house and its families*. Llandysul: Gomer Press. ISBN 1859028020

1.25 Morgan, G, 1997. *The Vaughans of Trawsgoed: a Welsh house and its family: a study of the Vaughan family and estate through seven centuries*. Llandysul: Gomer Press. ISBN 1859024726

1.26 Moore-Colyer, R J, 1998. The Landed Gentry of Cardiganshire. In Jenkins, G H and Jones, I G, eds. *Cardiganshire County History Volume 3 Cardiganshire in Modern Times*. Cardiff: University of Wales Press, chapter 3. ISBN 0708314899

1.27 Bowen, E G, 1979. *A History of Llanbadarn Fawr*. Llandysul: Gomer Press, 104-106. ISBN 0850885027

1.28 *ibid*, 104-106

1.29 Theakston, L E LI and Davies, J, 1913. *Some Family Records and Pedigrees of the Lloyds of Allt yr Odyn, Castell Hywel, Ffos y Bleiddiaid, Giffach Wen, Llan Llyr and Waun lfor*. Oxford: Fox, Jones & Co

1.30 *ibid*

1.31 Llywodraeth Cynulliad Cymru/Welsh Assembly Government, 1998. Digest of Welsh Historical Statistics 1700-1974 Tables 4.7a and 4.8d. Available from <http://wales.gov.uk/topics/statistics/publications/dwhs1700-1974/?lang=en> [Accessed 27 Apr 2009]

taxation, reduced farm incomes and poorer returns from rents^{1.32}. Figure 2, above, shows the sizes of Cardiganshire holdings relative to Wales as a whole; it may be seen that there is no significant difference. For occupier ownership of land the proportion of acreage in Ceredigion in 1887 was 19.3 per cent compared to an average for Wales of 10.2 per cent and 15.5 per cent across England^{1.33}. Kenneth Morgan reports that, by 1914, it was held that there was no difference in the average size of holdings between Wales and England^{1.34}. Moore-Colyer^{1.35} has suggested that nominal agricultural rents in Ceredigion were relatively higher than in other counties but that the picture was blurred through the granting of abatements on a significant scale. The constraints imposed by the climate and the notoriously poor, acidic, soils compounded by unrealistic levels of mortgages and unfavourable market conditions together with an inability to compete with imports from overseas resulted in demands for rent rebates. These demands led, in turn, led to reduced income for landowners and the resulting pressure to sell land. Spencer Thomas describes conflicts of interest between landowners and

1.32 Morgan, G, 2006. *Ceredigion: a Wealth of History*. Llandysul: Gomer Press, 188-202. ISBN 1843235013; Moore-Colyer, R J, 1998. The Landed Gentry of Cardiganshire. In Jenkins, G H and Jones, I G, eds. *Cardiganshire County History Volume 3 Cardiganshire in Modern Times*. Cardiff: University of Wales Press, 69-75. ISBN 0708314899

1.33 Davies, J, 1974. The end of the great estates and the rise of freehold farming in Wales. *Welsh History Review*, 7, (2), 212; Another source states that in Cardiganshire the level of owner-occupation, at 21 per cent, was the highest in Wales. In Caernarfonshire it was 4.6% and in England it was 16 per cent. See Jones, R M, 1981. *The North Wales Quarrymen 1874-1922*. Cardiff: University of Wales Press, 10. ISBN 0708308295

1.34 Morgan, K O, 1982. *Rebirth of a Nation: Wales 1880-1980*. Oxford: Oxford University Press, 141. ISBN 0198217609

1.35 Moore-Colyer, R J, 1998. Agriculture and land occupation in Eighteenth- and Nineteenth-century Cardiganshire. In Jenkins, G H and Jones, I G, eds. *Cardiganshire County History Volume 3 Cardiganshire in Modern Times*. Cardiff: University of Wales Press, 33-36. ISBN 0708314899

tenants in the context of the Alltlywd estate in Llanrhystud^{1.36}. In 1886 the tenants of Major John George Parry Hughes complained that their rents, even though they had been fixed as far back as 1846, were too high. The properties were re-valued and, in some cases, lower rents were recommended. The landlord still failed to attract tenants at these revised rents and was forced to reduce them further. Some tenants defaulted even at the level of the lower rents and were forced to give up their holdings. So, on the one hand the income of the estate was under pressure, whilst on the other, tenants were reluctant to undertake improvements for fear of rent increases compounded by the practice of yearly tenancies. The outcome of this vicious cycle was a fall in the population of the parish and, in the longer term, the disintegration of the estates.

Commenting on landlord-tenant relations, Kenneth Morgan suggests that:

“Most landowners and their agents seemed more concerned to maintain amicable relations with their tenants, most of whom had been settled on farmsteads for generations, rather than strike out boldly for agricultural improvement or innovation.”

but then goes on to say:

“. . .the landlords were increasingly unsuccessful in this endeavour as differences in religion, language, and political outlook between them and their tenants poisoned relations in rural society and added an ideological edge to very real financial problems.”^{1.37}

Moore-Colyer illustrates one example of market pressure when discussing the impact of overseas imports on the market for salted butter produced on

1.36 Thomas, S, 1957, Land occupation, ownership and utilization in the parish of Llansantffraid. *Ceredigion*, 3, (2), 152

1.37 Morgan, K O, 1982. *Rebirth of a Nation: Wales 1880-1980*. Oxford: Oxford University Press, 81. ISBN 0198217609

Cardiganshire farms, citing domestic rail transport as a contributory factor^{1.38}. It may be that his suggestion of cause-and-effect is simplistic and the point is further discussed in the next section which deals with road and rail transport. It is possible that the changing tastes of consumers in favour of unsalted, fresh, butter was the major factor reinforcing the competitive pressures on those producers unwilling or unable to adapt. Figure 3, below, shows the indexed price for salted butter at Carmarthen from 1851 to 1901.

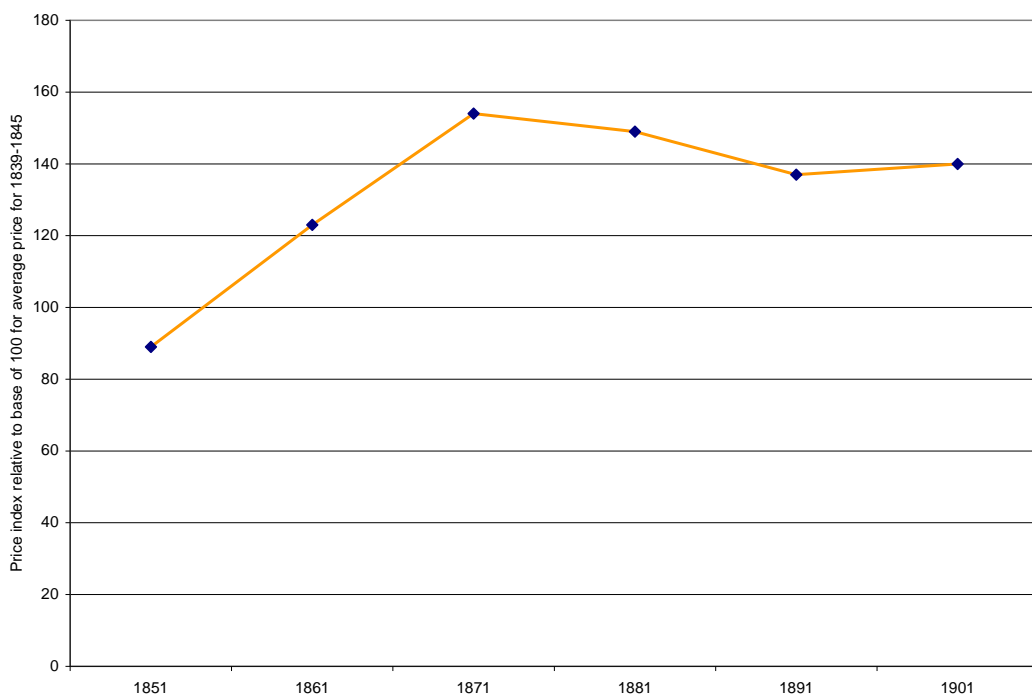


Figure 3 – Annual average price of salted butter, Carmarthen, 1851-1901^{1.39}

1.38 Moore-Colyer, R J, 1998. Agriculture and land occupation in Eighteenth- and Nineteenth-century Cardiganshire. In Jenkins, G H and Jones, I G, eds. *Cardiganshire County History Volume 3 Cardiganshire in Modern Times*. Cardiff: University of Wales Press, 47. ISBN 0708314899

1.39 Llywodraeth Cynulliad Cymru/Welsh Assembly Government, 1998 Digest of Welsh Historical Statistics 1700-1974 Table 4.11b <http://wales.gov.uk/topics/statistics/publications/dwhs1700-1974/?lang=en>. [Accessed 2 May 2009]

Moore-Colyer^{1.40} also refers to the introduction of refrigerated ships facilitating the import of meat and the consequent impact on prices for sheep and cattle obtained by domestic producers. In a Ceredigion context the point is again made that tenant farmers would be looking for rent relief to offset reduced incomes, higher taxes and mortgage liabilities. Most tenant farmers operated at little more than subsistence level and were not interested in or were unable to improve their land or their husbandry by adopting new methods of cultivation or introducing different breeds of livestock. These small Cardiganshire farms, or smallholdings, were usually worked as a family unit by the farmer with his wife and children. Sometimes the family unit would be comprised of siblings in the form of unmarried brothers or sisters. The farmer's wife would attend to the dairy and poultry in addition to her household and family responsibilities. The younger children of the farm were also a source of labour. Older sons were employed as labourers, often on the farms of neighbours or relatives, and older daughters would work 'at home' or for local farmers so acquiring the essential skills they could apply in later life. Figure 4, below, shows average weekly agricultural earnings across Welsh counties in 1898. Farm workers in Ceredigion were more poorly paid (at 74 pence per week) than those in other counties. The higher remuneration found in Glamorganshire probably reflected competition for labour from heavy industry which was able to pay higher wages in that area.

1.40 Moore-Colyer, R J, 1998. Agriculture and land occupation in Eighteenth- and Nineteenth-century Cardiganshire. In Jenkins, G H and Jones, I G, eds. *Cardiganshire County History Volume 3 Cardiganshire in Modern Times*. Cardiff: University of Wales Press, 35. ISBN 0708314899

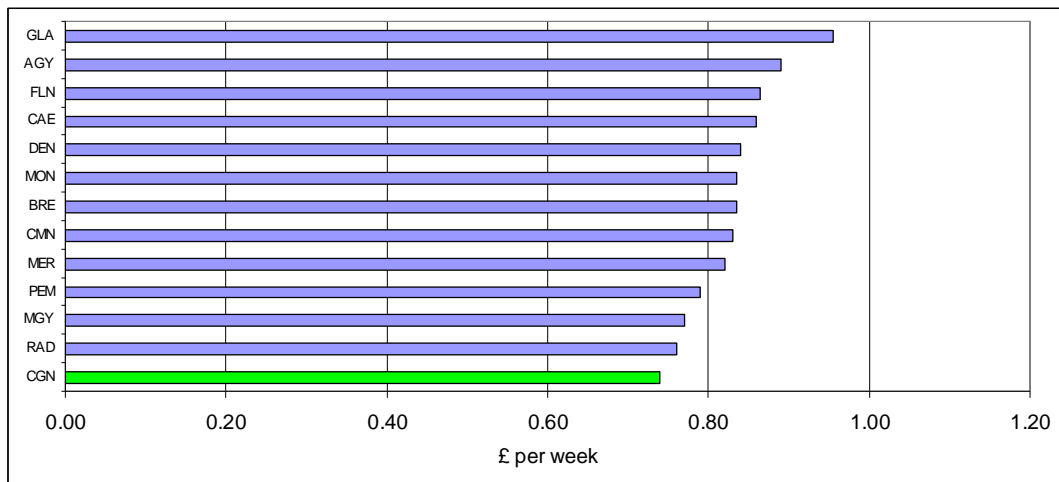


Figure 4 – Average weekly agricultural wage by Welsh county in 1898^{1.41}

In the late nineteenth century out-migration from Ceredigion resulted in a net fall in population. This topic is the subject of a new publication by Cooper but it has not been possible to take account of this work in the final preparation of this dissertation^{1.42}. Benbough-Jackson suggests^{1.43} that this led to an ageing population combined with an imbalance between genders. Aitchison and Carter reported on population trends for Ceredigion over a timespan of some 200 years and in great detail^{1.44}. They attributed the decline in population after 1875 to competition from food imports, to lower lead ore production, and to better paid job opportunities in the coal and steel industries of south Wales. For those farmers who kept flocks of sheep, wool production was an important source of revenue for the farm and had implications for others in the

1.41 Llywodraeth Cynulliad Cymru/Welsh Assembly Government, 1998 Digest of Welsh Historical Statistics 1700-1974 Table 3.3b <http://wales.gov.uk/topics/statistics/publications/dwhs1700-1974/?lang=en>. [Accessed 29 Apr 2009]

1.42 Cooper K J, 2011. Exodus from Cardiganshire: Rural-urban migration in Victorian Britain. Cardiff: University of Wales Press. ISBN 9780708323991

1.43 Benbough-Jackson, M, 2007. *Cardiganshire: A concise history*. Cardiff: University of Wales Press, 114. ISBN 9780708321119

1.44 Aitchison, J W and Carter, H, 1998. The Population of Cardiganshire. In: Jenkins, G H and Jones, I G, eds. *Cardiganshire County History Volume 3 Cardiganshire in Modern Times*. Cardiff: University of Wales Press, chapter 1. ISBN 0708314899

local economy who were operating both on an industrial scale and as a cottage industry. The most important area for woollen weaving in Ceredigion was centred on the Teifi valley, outside the geographical scope of the present study. There was industrial-scale manufacture in Tal-y-bont where the flannel mills were located on the Afon Leri which provided water for processing and power to drive the machinery. By 1810 five small mills had been established there producing flannel for the lead miners of the district^{1.45}. J G Jenkins^{1.46} also describes how farmers would take their fleeces to factories in Llanrhystud, Tal-y-bont, Capel Dewi, Capel Bangor and Llanfihangel-y-Creuddyn where yarn was produced. Woollen yarn was used to weave flannel or cloth and these materials might then support local tailors and dressmakers who then made-up garments to order. A number of independent weavers worked looms in their own homes and then sold the flannel back to the mill from which they had sourced their yarn. Lone homeworkers, usually widows, operated as hand knitters of stockings and gloves.

1.2.3 Road and rail communications

Moore-Colyer^{1.47} has traced the development of the road network across Cardiganshire from the time of Hywel Dda until the establishment of the turnpike trusts in the eighteenth century. He describes, especially, the pattern

1.45 Jenkins, J G, 1991. *Life & Tradition in Rural Wales*. Stroud: Alan Sutton Publishing, 104. ISBN 0862999448

1.46 Jenkins, J G, 1969. *The Welsh Woollen Industry*. Cardiff: National Museum of Wales. ISBN 0854850007

1.47 Moore-Colyer, R, 1984. *Roads and Trackways of Wales*. Ashbourne: Moorland Publishing, chapter 2. ISBN 0861901223

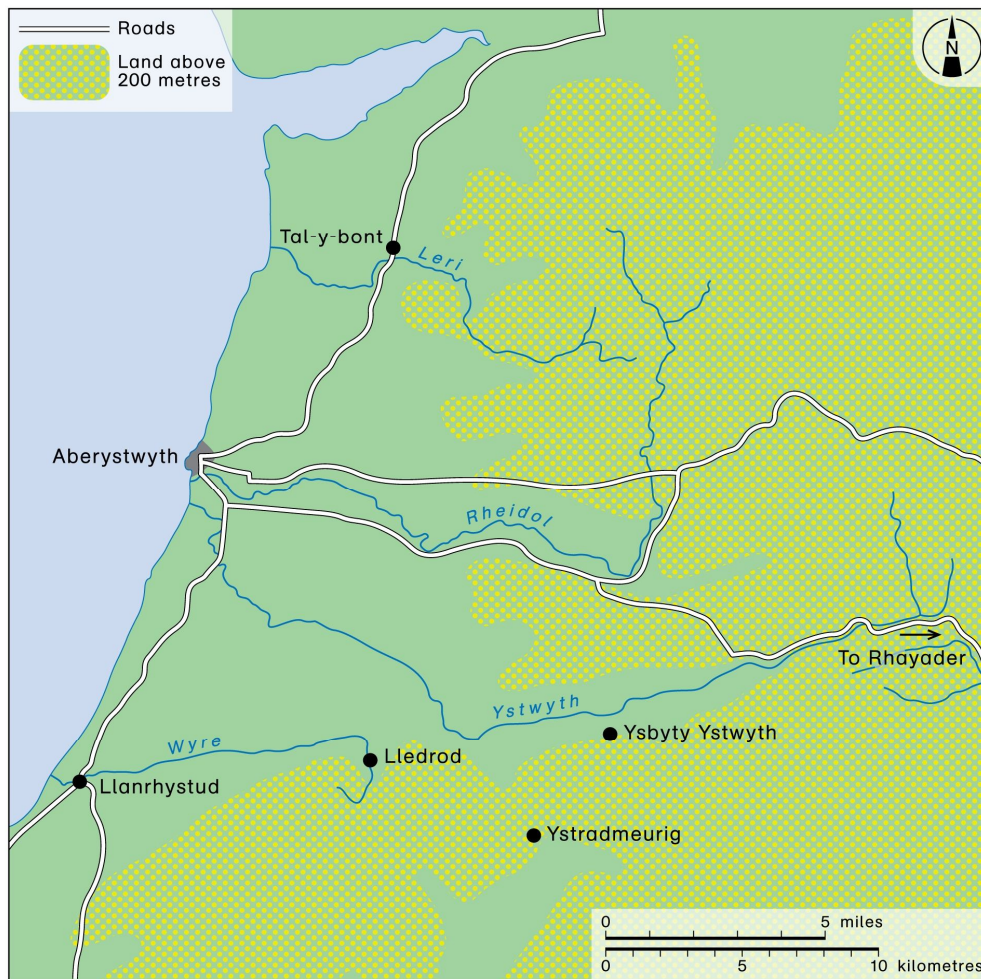


Figure 5 – The principal road system circa 1850

of roads that led to the Cistercian abbey of Strata Florida, an important focus for pilgrims^{1.48}. The principal road network, comprising post roads and turnpike roads, that existed around the middle the nineteenth century is shown in Figure 5, above.

Roland Thorne^{1.49} affirms that the northern part of the county was not affected by the Rebecca Riots, the violent protests that took place in agricultural communities around 1840, in response to perceived high taxes and tolls.

1.48, *ibid*, 66-67

1.49 Thorne, R G, 1998. Parliamentary representation: From the First to the Third Reform Acts, 1832-1885 *In*: Jenkins, G H and Jones, I G, eds. *Cardiganshire County History Volume 3 Cardiganshire in Modern Times*. Cardiff: University of Wales Press, 392. ISBN 0708314899

Spencer Thomas records that the tollhouse and tollgate at Llan-non, on the turnpike road running south from Aberystwyth to Aberaeron, were destroyed by the Rebecca Rioters in 1844^{1.50}. Llan-non lies just outside the southern boundary of the present study area. Turnpike or toll roads were established in order to raise revenue to be used to build and maintain roads. The initiative behind this normally lay with the landed proprietors who were anxious to promote trade and commerce but were hampered by inadequate roads. The principal road network that existed before the coming of the railways is shown in Figure 5, above. Moore-Colyer describes the main road into mid-Wales around 1800^{1.51}. This ran from Presteigne on the Herefordshire-Radnorshire border, to Rhayader and then climbed through the valley of the Afon Elan up to the Afon Ystwyth watershed at Blaen-y-Cwm (grid reference SN854757), down to Cwmystwyth and then on to Devil's Bridge. From there the route was to Capel Seion on the (modern) A4120, entering Aberystwyth via the toll at Southgate. The present Northgate Street derives its name from an equivalent facility on the opposite side of town and not, as in Great Dark Gate Street, from the entry points in the medieval town wall^{1.52}.

Bowen describes^{1.53} how Llanbadarn Fawr had, in 1846, a nodal position at the junctions of the post road which ran west into Aberystwyth via Northgate and east towards Ponterwyd, together with the road running north-east to

1.50 Thomas, S, 1957, Land occupation, ownership and utilization in the parish of Llansantffraid. *Ceredigion*, 3, (2), 130

1.51 Moore-Colyer, R, 1984. *Roads and Trackways of Wales*. Ashbourne: Moorland Publishing, 176. ISBN 0861901223

1.52 Lewis, W J, 1980. *Born on a Perilous Rock. Aberystwyth Past and Present*. Aberystwyth: Cambrian News, 121. ISBN 0900439041

1.53 Bowen, E G, 1979. *A History of Llanbadarn Fawr*. Llandysul: Gomer Press, 158-159. ISBN 0850885027

Capel Dewi and Penrhyn-coch, the southerly road over Blaendolau Flats to Southgate, and the route northwards past Brynamlwg and on to Borth. He makes the point that, in addition to turnpike roads there were also post roads and drovers' roads. The modern A44 was originally a post road used by messengers on horseback and by mail coaches. The drover roads were, of course, recognized tracks used to drive herds of shod cattle, and sheep and pigs, eastwards into England for sale at market or for fattening on the pasture-lands of the shires. Bowen proceeds to set the scene for the coming of the railways in the context of the transport requirements, firstly of the coalfields in north-east and south Wales, and secondly by the need to construct lines to the west coast to serve mail packets to Ireland^{1.54}. However, mid-Wales was rather side-lined when the Chester & Holyhead Railway established Holyhead as the principal port for Irish traffic in 1848^{1.55}. Newtown had been connected to the English Midlands when the Montgomeryshire Canal opened in 1821. Under the dynamic direction of David Davies of Llandinam and his associate Thomas Savin, the Oswestry & Newtown Railway had been opened as far as Newtown by 1860^{1.56}. West of Newtown the geography presented a challenge to the surveyors of potential routes to the coast. A route based upon a direct projection was blocked by Pumlumon and a more northerly route from Caersws to Machynlleth was chosen. Even this softer option presented major and expensive engineering challenges in

1.54 *ibid*, 161-162

1.55 Anderson, V R and Fox, G K, 1984. *An Historical Survey of Chester to Holyhead Railway*. Poole: Oxford Publishing. ISBN 0860932168

1.56 Christiansen R and Miller R W, 1971. *The Cambrian Railways Volume 1: 1852-1888*. Newton Abbot: David & Charles, Appendix 1. ISBN 0715352369

the form of the summit of the line at Talerddig, near Llanbryn-mair. This required the line to climb to some 200m above sea level where, initially, a tunnel was planned but then rejected in favour of a rock cutting. At the time of its construction this cutting, at 35m deep, was the deepest in the world. The line opened to Machynlleth in January 1863. From there the Aberystwyth & Welsh Coast Railway was extended, opening first to Borth in July 1863 and, finally, to Aberystwyth on 23 June 1864^{1.57}.

The second railway line shown in Figure 1, above, is that which ran southwards from Aberystwyth to Carmarthen via Pencader. This was the Manchester & Milford Railway, a rather fanciful enterprise intended to connect the Lancashire mills with the cotton growers in north America, but using Milford Haven as an alternative port to Liverpool. The line opened in 1867 and closed in 1965^{1.58}.

D W Howell^{1.59} has argued that farms in the more remote parts of Wales were small and rather isolated from commercial pressures. There was a limited range of available activities dictated by the constraints of climate and soil conditions, accompanied by increasing demand for farm tenancies resulting from population growth from the mid eighteenth century onwards. Howell suggests, like Moore-Colyer (see section 1.2.2, above), that Welsh farmers did not have access to the necessary capital to undertake improvements and that the adoption of new, more advanced ideas, was inhibited by the

1.57 *ibid*, chapter 3

1.58 Bowen, E G, 1965. *Communications In: Bowen, E G, ed. Wales: A Physical, Historical and Regional Geography*. London: Methuen, 223-225

1.59 Howell. D W, 1974/75, The Impact of Railways on Agricultural Development in Nineteenth-century Wales. *Welsh History Review*, 7, 40-62

language barrier. Furthermore, Howell states that ‘the Welsh peasant mentality’ militated against farm improvements in case those enabled landlords to increase rents. He says that this perception of the relationship between improvements and rents dictated the relationship between tenant farmer and landowner. Howell describes the key features of agricultural production and marketing before the coming of the railways^{1.60}, involving export of livestock to England for fattening through the droving system, and the use of local markets for sale of dairy products and eggs. Some agricultural produce destined for south Wales consumers was consigned through Bristol and then trans-shipped onwards. The ability to access markets directly by rail changed the nature of trade and enabled Welsh farmers to compete more effectively with domestic and overseas producers. Howell states that butter produced in south-west Wales and then conveyed by cart to Merthyr incurred transport costs of 11.25 pence per ton-mile; by rail transport costs were 1.25 pence per ton-mile^{1.61}. It is alleged that it was cheaper to import feed for the horses at Dowlais ironworks from Ireland than it was to source oats from Brecon, some thirty-five kilometers away. The droving system was replaced by rail transport and this enabled farmers with access to suitable pasture to market livestock in better physical condition and at a better price with reduced costs. Howell comments in some detail on the inability of Welsh producers of salted butter to compete with imports through not adapting to changing consumer tastes, with poor packaging and lack of

1.60 *ibid*, 41

1.61 *ibid*, 45

branding designed to create a perception of quality^{1.62}. There was also an unwillingness on the part of some farmers to create co-operatives for processing and marketing dairy products in order to compete with those enterprises that existed, from 1870, in the dairy-farming regions of England. Howell, again, attributes this desire for independence to the fear that any capital investment by a farmer in a joint venture would simply result in rent increases. Howell does highlight one activity, though only implemented on a relatively small scale, where rail transport opened up new markets and where there was no overseas competition. This was the production of liquid milk in some coastal areas for the large industrial populations. Howell, again, applies the term 'peasant mentality' when explaining that most farmers failed to use the advantages offered by rail transport to develop the dairy industry. Finally he concludes that tenant farmers were not justified in fearing their rents would increase if they invested in and improved their businesses. Access to rail did not change their outlook and the opportunities for new marketing initiatives were largely ignored. Benbough-Jackson adds a further dimension to this assessment of the negative view of the advantages offered by rail transport by referring to the perception that rail freight rates were excessive at a time when markets were depressed^{1.63}.

1.62 *ibid*, 54

1.63 Benbough-Jackson, M, 2011. *Cardiganshire and the Cardi, c 1760 – c 2000. Locating a place and its people*. Cardiff: University of Wales Press, 112. ISBN 9780708323946

1.2.4 Mining

The lead mining industry in the Ystwyth and Rheidol valleys of north and east Ceredigion experienced peak activity in the middle of the nineteenth century before commencing a long and gradual decline. Figure 6, below, shows the reported output of copper, lead and zinc ores in Ceredigion between 1855

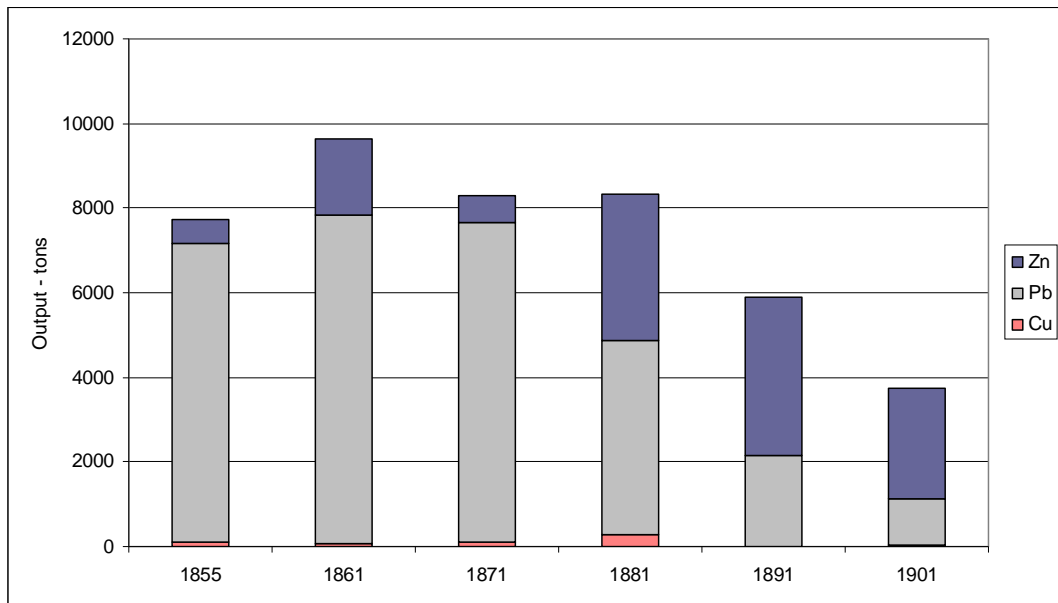


Figure 6 – Production of Copper, Lead and Zinc ores by Ceredigion mines, 1855 - 1901^{1.64}

and 1901. Lewis^{1.65} reports that:

‘... in 1857, at the height of the boom, when there were sixty mines officially at work and many more being worked unofficially, only ten produced more than 200 tons of ore each. Of the 7,573 tons produced in that year, over 7,000 tons came from only five mines;...

1.64 Llywodraeth Cynulliad Cymru/Welsh Assembly Government, 1998. Digest of Welsh Historical Statistics 1700-1974 Tables 7.1, 7.3 and 7.4 <http://wales.gov.uk/topics/statistics/publications/dwhs1700-1974/?lang=en>. [Accessed 15 Jun 2009]

1.65 Lewis, W J, 1998, Lead mining in Cardiganshire. In: Jenkins, G H and Jones, I G, eds. *Cardiganshire County History Volume 3 Cardiganshire in Modern Times*. Cardiff: University of Wales Press, 169. ISBN 0708314899; *ibid*, 181

Lewis also makes the point that miners often followed other interests, such as working small agricultural holdings and that their wives and children might also be engaged in both activities, perhaps at different seasons of the year in tune with the farming calendar. This description of the connection between the lead miners of Ceredigion and their smallholdings is closely echoed by R M Jones's account of some aspects of the life of the slate quarrymen of Caernarfonshire and Meirionnydd. He comments ' . . .The farmer's calendar was, therefore, to some extent the quarryman's . . .'^{1.66}. There are also clear parallels with the observation that quarrymen and their children would be absent from work and from school during the hay harvest in July.

Neil Evans, however, observes that in the area of labour relations and radical politics slate quarrymen had more in common with the south Wales colliers^{1.67}. A perceived lack of organisational cohesion among lead miners, compared with other groups that formed trades unions to press for improved working conditions through collective bargaining may have been a function of the scattered locations of the mines and their small and dispersed work force. It is unlikely that the Ceredigion miners could ever have taken action on the scale of the futile Penrhyn quarry strike mounted by the North Wales Quarrymen's Union in the opening years of the twentieth century – *Y Streic Fawr*^{1.68}. The numbers employed in the slate quarries could be counted in the thousands; in 1891 the Union had some 6 000 members^{1.69}. Ginswick records

1.66 Jones, R M, 1981. *The North Wales Quarrymen 1874-1922*. Cardiff: University of Wales Press, 19. ISBN 0708308295

1.67 Evans, N, 2005. Rethinking urban Wales. *Urban History*, 31, (1), 118

1.68 Jones, R M, 1981. *The North Wales Quarrymen 1874-1922*. Cardiff: University of Wales Press, chapter 8. ISBN 0708308295

1.69 *ibid*, 330

that the numbers employed in the lead mines in Ceredigion amounted to some several hundred^{1.70} and were (in 1841) about one-third of the number of lead miners employed in Flintshire.

In his annual report for 1900, Chief Constable Howell Evans reported that, on 14 November, the managing director of the Ffrongoch lead mines had requested police protection when 250 'Welsh' miners had gone on strike. One grievance concerned perceived favourable treatment given to Italian miners. Evans noted that 'some hooting was indulged in by some of the younger miners but beyond that the Welshmen behaved themselves admirably'^{1.71}.

Bick records that^{1.72} in 1859, children were paid an average of 76 pence per month of twenty-six working days of up to eleven hours per day. In the twilight days of the industry it was only natural that the miners of Ceredigion, by applying their transferable skills, should leave to seek employment in the south Wales coalfield. These miners were accompanied by farm labourers who were made redundant as a result of the depression in agricultural prices between 1875 and 1895. Kenneth Morgan^{1.73} uses the really telling phrase 'took refuge in the collieries of the south' when describing this outward movement of labour. John Williams, however, sees things rather differently, referring to the ability of the south Wales coal mines to 'absorb the numbers

1.70 Ginswick, J, 1983. *Labour and the Poor in England and Wales 1849-1851. Volume 3. The Mining and Manufacturing Districts of South Wales and North Wales*. London: Cass, 213. ISBN0714640409

1.71 Evans, H, 1900. *Standing Joint Committee Minutes, Cardiganshire Constabulary 1900-01*. Aberystwyth: Chief Constable's Office, 8

1.72 Bick, D, 1993. *The Old Metal Mines of Mid-Wales*. Combined edition. Newent: Pound House, Part 1, 28. ISBN 0906885124

1.73 Morgan, K O, 1982. *Rebirth of a Nation Wales 1880-1980*. Oxford: Oxford University Press, 82. ISBN 0198217609

being released from agriculture'^{1.74}.

When lead mining disappeared from Ceredigion the evidence for its physical presence did not vanish; the permanent remains are only too visible – see Figure 29, below.

1.2.5 Social issues, including education, health, and housing

In the seventeenth and eighteenth centuries the sons of gentry families were generally sent away to public schools in England and may have attended seats of learning at Oxford or London^{1.75}. For ordinary people the ability to read and write was encouraged in order to attain a level of literacy essentially based upon Scripture. This was the objective of the Anglican vicar Griffith Jones of Llanddowror, and his 'circulating schools', and the Methodist minister Thomas Charles of Bala. There was no structured education provision outside church and chapel Sunday Schools. In Ceredigion there were no established Tudor foundation schools like those in Bangor or Carmarthen; only schools operated by private individuals. These were often initiated by clergymen wishing to supplement their income by offering private tuition. Gerald Morgan describes one 'school of real note' that was established in Ystrad Meurig by Edward Richard in 1734^{1.76}. In 1746 a second school was established in Lledrod and

1.74 Williams, J, 1995. *Was Wales Industrialised? Essays in Modern Welsh History*. Llandysul: Gomer Press, chapter 13, Occupations in Wales, 1851-1971, 304. ISBN 1859021395

1.75 Morgan, G, 2006. *Ceredigion: a Wealth of History*. Llandysul: Gomer Press, 237-238. ISBN 1843235013

1.76 *ibid*, 240-241

Richard became headmaster of both establishments^{1.77}. The school at Ystrad Meurig offered an, essentially, classical education and the students generally went on to become clergymen and ministers. Morgan notes that this school retained its independent existence until it closed in 1974. W J Lewis describes the establishment of Aberystwyth Grammar School in 1813^{1.78} and makes a passing reference to Llanfihangel Geneu'r Glyn Grammar School^{1.79}. Any overview of education provision in nineteenth century Ceredigion must take account of the 1847 Commission of Enquiry which reported that schooling in Wales was quite inadequate and highlighted many aspects that were deficient, particularly in rural areas. As the report also concluded that the Welsh were ignorant, lazy and immoral it caused national outrage and deep resentment. The report, published in three volumes, came to be known as the *Treason of the Blue Books* or *Brad y Llyfrau Gleision*. At the time of the Inquiry education was not compulsory and its provision was local, patchy and chaotic. These deficiencies were partly addressed by the Education Act of 1870^{1.80}; this led to the formation of schools boards of management, but only at elementary level. The Commissioner appointed to inquire into conditions in Ceredigion was Mr J C Symons. He had visited Llanychaearn on 20 Nov 1846 and noted^{1.81}:

1.77 Osborne-Jones, D G, 1934. *Edward Richard of Ystrad Meurig with the story of his school and its associations under its successive Masters 1734-1934*. Carmarthen: Spurrel

1.78 Lewis, W J, 1980. *Born on a Perilous Rock. Aberystwyth Past and Present*. Aberystwyth: Cambrian News, 164. ISBN 0900439041

1.79 *ibid*, 162

1.80 Morgan, G, 2006. *Ceredigion: a Wealth of History*. Llandysul: Gomer Press, 248. ISBN 1843235013

1.81 Symons, J C, 1847. *Report of the Commissioners of Inquiry into the State of Education in Wales. Part 2, Brecknock, Cardigan, Radnor and Monmouth*. London: William Clowes and Sons for HMSO, 148.

‘...I found the schoolhouse by the roadside; it was empty, having been given up for some time. It consists of a single room, with an earth floor, and with the roughest benches and desks. ... We collected six children. ... Of arithmetic they knew next to nothing. Of their general information an estimate may be made by the result of these questions:- How many weeks in the year? None knew. What is England? Four said a parish and two a country. Of Ireland they had never heard, and did not know whether it was a man, or town, or country...Mr Rowland [leading trustee of the school] said many of the children of the neighbourhood were no better informed than those I had examined, and that the poor people there, though very anxious for better education, had not money for meat much less for schooling. He expressed great pleasure at the inquiry made by the government and said that they desired to have a good school open to all classes...’

In due course Kelly was able to report that^{1.82}:

‘...Llanychaearn has a school board of 5 members formed on 14 June 1874; Edward H Davies, clerk to the board; John Morgan, attendance officer. Board school (mixed), built in 1876, for 150 children; average attendance, 63; Rhys Rufus Davies, master...’

A correspondent cited by Ginswick^{1.83} is reported to have commented on the poor state of housing and education provision for the lead mining communities of Ceredigion:

‘ . . . As this district is now under the care of one of the ablest and most diligent of the Government Inspectors of Education (Mr Jelinger Symons), we may hope that the evil of deficient school accommodation will be yearly lessened. . . . ’

Local authority sponsored secondary schools were created after the 1889 Welsh Intermediate and Technical Education Act had been passed^{1.84}. This legislation allowed for the establishment of county joint education committees which were to draw up plans for ‘county’ secondary schools. There were five

1.82 *Kelly's Directory of South Wales 1895*. London: Kelly & Co, 477

1.83 Ginswick, J, 1983.*Labour and the Poor in England and Wales 1849-1851. Volume 3. The Mining and Manufacturing Districts of South Wales and North Wales*. London: Cass, 214. ISBN0714640409

1.84 Morgan, G, 2006. *Ceredigion: a Wealth of History*. Llandysul: Gomer Press, 248. ISBN 1843235013

county schools in Ceredigion, one being in Aberystwyth^{1.85}. The original, private, Aberystwyth grammar school had existed from 1813 to 1836^{1.86}. Ardwyn county school opened in 1896; county schools later became grammar schools.

One positive and quite profound response to the 1847 Commission of Inquiry report was the realisation that there was a pressing need for a higher education institution within Wales. Over time a movement for the creation of a national university for Wales gathered momentum, and acquired funds^{1.87}. One of the main promoters of the Cambrian Railways into Aberystwyth (along with David Davies, Llandinam) was Thomas Savin who had purchased a large house on the sea-front in order to convert it into first-class accommodation for his railway passengers. The Castle Hotel, as it was called, was extensively rebuilt at great expense to a design by J P Seddon but the project was not a commercial success and the building was left unfinished and unused^{1.88}. By 1866 the financial state of the Cambrian Railways was not healthy, and receipts were below the characteristically over-optimistic forecasts for traffic growth. Both the Cambrian and the Manchester & Milford were essentially passenger railways. The profitable English companies made their money from freight and not people; these rural Welsh railways were always tottering on the brink of failure. At the same time there

1.85 Williams, G W, 1983. *The Disenchantment of the World: Innovation, Crisis and Change in Cardiganshire c 1880-1910. Ceredigion*, 9, (4), 314

1.86 Lewis, W J, 1980. *Born on a Perilous Rock. Aberystwyth Past and Present*. Aberystwyth: Cambrian News, 164. ISBN 0900439041

1.87 Morgan, G, 2006. *Ceredigion: a Wealth of History*. Llandysul: Gomer Press, 251. ISBN 1843235013

1.88 Christiansen, R and Miller, R W, 1971. *The Cambrian Railways Volume 1: 1852-1888*. Newton Abbot: David & Charles, 94. ISBN 0715352369

were other indications of problems in the wider economy with the (now) notorious failure of the Overend & Gurney Bank on 10 May 1866. (The last failure of a major UK bank until 2007-2008!). Savin had been declared bankrupt a few months earlier^{1.89}. The committee working for the establishment of a university suddenly saw an opportunity to purchase a large and prestigious building for a very low price. The Castle Hotel was purchased for £10 000 in 1867, converted and opened to its first students in 1872. So, Aberystwyth became host to the first, and senior, college within the University of Wales federated structure. By 1894-95 Kelly reported^{1.90} that student numbers were some 340 and that the subjects offered included classics and Oriental languages, modern languages, history, English, Welsh, mathematics, chemistry, physics, biology, botany, agriculture and veterinary science. There was a 'normal' department for training elementary and the new breed of secondary teachers which offered instruction in music, drawing and needlework.

Any discussion of the factors impacting upon the lives and living conditions of the poorer classes should take account of domestic matters in respect of contemporary health and housing. The diet normally 'enjoyed' by many households was simple, often lacking in variety and deficient in protein and fresh fruit and vegetables. The writer's mother recalls being told by *her* parents of times in rural Caernarfonshire, before the First World War, when supper might comprise of stale bread moistened with hot water and seasoned with salt and pepper, together with tea. There may be some parallels between

1.89 *ibid*, 73

1.90 *Kelly's Directory of South Wales 1895*. London: Kelly & Co, 58

the lead miners and farm labourers of Ceredigion and the Caernarfonshire slate quarrymen with the observation of R M Jones: ‘ . . . tea for breakfast, tea for lunch, tea for tea, and tea for supper . . . ’^{1.91}. This limited and sub-standard diet providing little of nutritional value was not confined to the communities described here. Wohl^{1.92} quotes from the Annual Report of the Medical Officer of Health to the Privy Council for 1864, referring to communities in Liverpool, “multitudes of people . . . whose daily food consists at every meal of tea and bread, bread and tea”. In Ceredigion at this time living conditions were notoriously poor with cottages being overcrowded, dark and unsanitary. It was not surprising that malnourished family members so easily succumbed to diseases such as measles, scarlet fever, diphtheria and tuberculosis.

In a lecture given in September 1999, Dr John Hughes, former Aberystwyth general practitioner and lecturer in Medical Law at the University compared the public health situation in the old Aberystwyth Borough with that in Wales as a whole^{1.93}. He stated that Aberystwyth had one of the worst mortality rates in Wales, especially amongst children. In the eight years from 1899 to 1906 the causes of recorded fatalities were: tuberculosis – 179; gastro-enteritis – 32; whooping cough – 22; measles – 19; diphtheria – 10; scarlet fever – 8; and, typhoid – 1. It was also suggested that when men afflicted with tuberculosis left Ceredigion to work in the south Wales collieries, they became incapacitated through the ingestion of coal dust into their lungs.

1.91 Jones, R M, 1981. *The North Wales Quarrymen 1874-1922*. Cardiff: University of Wales Press, 31. ISBN 0708308295

1.92 Wohl, A S, 1983. *Endangered lives: Public Health in Victorian Britain*. London: Dent, 50. ISBN 0460042521

1.93 Report of meeting, Oct 1999. The changing patterns of disease in the twentieth century. *Journal of Cardiganshire Family History Society*, 2, (3), 58

Kenneth Morgan has highlighted the persistent problem of tuberculosis in both urban south Wales and the rural areas in the west and north, citing the reforming efforts of David Davies, M P, of Llandinam, grandson of David Davies, the colliery owner and railway promoter^{1.94}. Aberystwyth had an infirmary in North Road, dispensaries and medical and dental practitioners and the union workhouse, for the relief of paupers, at Bronglais^{1.95}.

1.2.6 Tourism

Aberystwyth could claim a nascent tourist industry as far back as the eighteenth century when wealthy leisured visitors came to take the waters, indulge in sea bathing and gain spiritual inspiration from the hills, mountains, valleys and rivers. Through the nineteenth century the town developed as a resort with the addition of new hotels and guest houses, assembly rooms, theatre, pier, public baths, and a promenade^{1.96}. From 1864 Aberystwyth was connected by railway to Shrewsbury via Machynlleth and Welshpool. There were stations at Dyfi Junction, Glandyfi, Ynys-lâs, Borth, Llandre (formerly Llanfihangel) and Bow Street. In 1867 The Manchester & Milford Railway opened up a link to Carmarthen via Tregaron, with stations at Llanrhystud Road, Llanilar, Trawscoed and Strata Florida (actually Ystrad Meurig). By

1.94 Morgan, K O, 1982. *Rebirth of a Nation Wales 1880-1980*. Oxford: Oxford University Press 125, 232-236, 346. ISBN 0198217609

1.95 Morgan, G, 2006. *Ceredigion: a Wealth of History*. Llandysul: Gomer Press Chapter 20. ISBN 1843235013

1.96 Lewis, W J, 1980. *Born on a Perilous Rock. Aberystwyth Past and Present*. Aberystwyth: Cambrian News, Chapter 22. ISBN 0900439041

1895 Kelly^{1.97} was claiming, with some justification, of Aberystwyth:

‘...From its beautiful position on the shores of Cardigan Bay, together with its mountain scenery, which includes the celebrated Plinlimon (2,469 feet), the romantic beauty of the Rheidol and the Mynach at Devil’s Bridge; the warmth and salubrity of the climate and the attractiveness of its buildings, it is deservedly popular as a watering place, and since the opening of the Cambrian railway in 1864 and the Manchester and Milford railway, via Carmarthen, in 1867, it has been annually resorted to by thousands of visitors, and has weekly communication by steamer with Bristol and Liverpool. There are no sands, but at Borth, about six miles distant, they are very fine. The beach here is of shingle, with an admixture of dark coloured sand, and amongst the stones, pebbles of crystal, cornelian, jasper, onyx, trap stone, mochas and agate are met with, and are much sought after by visitors and polished by the lapidaries, of whom there are many in this town; the rocks also afford the naturalist opportunities of gathering several varieties of fucus and other algae and corallines, which abound in the creeks.’

The list of commercial enterprises in the town included, in addition to lapidaries and jewellers, hoteliers, many proprietresses of apartments, toy and fancy goods dealers, bathing machine proprietors, confectioners, cycle agents, and operators of omnibuses. One particular feature concerning the businesses of the town, which also helps to confirm its status as a fashionable Victorian resort, was the substantial number of photographic studios^{1.98}. Lewis notes a reference to Aberystwyth being called the ‘Brighton of Wales’ at the end of the eighteenth century^{1.99}. In its own promotional publications the Great Western Railway had even more ambitious aspirations with a chapter in a 1907 guide entitled ‘Aberystwyth – The British Biarritz’^{1.100}. The Cambrian Railways arrived at Borth a year before the

1.97 *Kelly’s Directory of South Wales 1895*. London: Kelly & Co, 55

1.98 Williams, S, Jun 2000. Aberystwyth Photographers of Yesterday. *Journal of Cardiganshire Family History Society*, 2, (5), 111-113

1.99 Lewis W J, 1980. *Born on a Perilous Rock. Aberystwyth Past and Present*. Aberystwyth: Cambrian News, 194. ISBN 0900439041

1.100 *South Wales: The Country of Castles*, Dec 1907. London: Great Western Railway Company, chapter 16

connection was made through to Aberystwyth^{1.101}. Until then it was a small fishing village with a modest harbour. Thomas Savin built an imposing hotel in Borth – the Cambrian (later the Grand) in an attempt to generate passenger traffic for the railway. Savin's Cambrian Hotel (see Figure 7, below) was largely underutilised for lengthy periods. In 1876 the Hotel, together with a number of adjoining houses, also built by Savin, were temporarily taken over by the staff and three hundred boys of Uppingham School. The village of Uppingham in Rutland suffered repeated outbreaks of typhoid fever caused by contaminated water supplies, threatening the future of the School which temporarily removed to Borth. The School remained at Borth for over a year



Figure 7 – The Cambrian Hydropathic Hotel, Borth

1.101 Green, C C, 1993. *The Coast Lines of the Cambrian Railways Volume 1*. Didcot: Wild Swan Publications, 129. ISBN 1874103070

and only returned to Rutland once it had been satisfied that the Uppingham Rural Sanitary Board had carried out the necessary works to rectify the problem^{1.102}.

There may be a certain irony behind this event for Green notes that^{1.103}:

‘The Inspector of Nuisances to the Rural Sanitary Board at Aberystwyth had laid complaints about the accumulation of stagnant water in the drainage ditches. The Climate of Borth is considerably damaged by such sources of dampness and malaria’.

Kelly^{1.104} affirmed that the water supply for Borth was drawn from wells in the neighbourhood. The corresponding statement for Aberystwyth reads:

‘ . . .The town has also been supplied, at a cost of £20,000, with a supply of pure water from Llyn Llygad Rheidol, a lake eleven acres in extent, on the northern side of the Plynlimmon mountain; the water is conveyed from an altitude of nearly 2,000 feet to the sea-level at Aberystwyth, a distance of 18 miles, in iron mains. . .’

A prospective visitor in the twenty-first century would not expect to find such assurances in the literature promoting the attractions of a British or European resort; clearly at the end of the nineteenth century potable water quality was still felt to be a matter of some sensitivity and concern. The commercial section of Kelly’s directory covering Borth^{1.105} lists the hydropathic hotel (the Cambrian, above), assembly rooms, a number of apartments and a large number of individuals identified as ‘master mariner’.

1.102 Richardson, N, 2007. The Uppingham Typhoid Outbreaks of 1875–1877: A Rural Case-Study in Public Health Reform. *Social History of Medicine*, 20, (2) 281–296

1.103 Green, C C, 1993. *The Coast Lines of the Cambrian Railways Volume 1*. Didcot: Wild Swan Publications, 130. ISBN 1874103070

1.104 *Kelly’s Directory of South Wales 1895*. London: Kelly & Co, 85; *ibid*, 55

1.105 *ibid*, 85-86

1.2.7 Other industries, enterprises and undertakings

Lewis^{1.106} describes the broad range of services and commercial activities centred on Aberystwyth. In considering this account it is clear that the town was the focus of an extensive array of interconnected enterprises that could reasonably be seen as characterising an advanced economy and sophisticated society. In addition to the traditional primary activities of mining, shipping and agriculture the town was a centre of service industries. An electricity generating station was built in Mill Street, Aberystwyth in 1892 and there had been a gas supply in the town since 1838 based on the gas works at the town end of Smithfield Road (now Park Avenue).

A Staffordshire man, George Green, operated one of several foundries in Aberystwyth that had been set up to manufacture machinery for the mining industry in the locality. As the Ceredigion mines started to decline, Green^{1.107} worked at developing markets overseas and had some success in exporting equipments to Eastern Europe and South America. One of the engineers who worked for Green, Henry Miller, spent some time in Colombia installing machinery in the silver mines. Miller took his family with him. Later, Henry Miller was employed by the Aberystwyth and Chiswick Electricity Co at their generating station in Mill Street^{1.108}. Henry Miller's father, William, a Sunderland man, was a partner in Hoskin and Miller Slate Works, one of

1.106 Lewis W J, 1980. *Born on a Perilous Rock. Aberystwyth Past and Present*. Aberystwyth: Cambrian News, Chapter 9. ISBN 0900439041

1.107 *ibid*, 97

1.108 Williams, P G, Feb 2006. Searching for Strangers (continued). *Journal, Cardiganshire Family History Society*, 4, (4), 84-86

several undertakings that manufactured ornamental and architectural slate. Many street names in Aberystwyth reflected the nature of local enterprises. Smithfield Road had a cattle market and abattoir, and Skinner Street was a locality where hides from slaughtered animals were converted into leather. Chalybeate Street still exists but Shipbuilders Row is now known as South Road. At Trefechan there was a maltings and brewery serving the many local taverns and hotels. The large number of public houses attracted journalistic criticism from Sir John Gibson, proprietor of the *Cambrian News*. Although not a native of Ceredigion, Gibson was an independent-minded man of recognised integrity who came to be highly-regarded as a promoter and defender of local good causes. In addition to supporting the temperance movement he was a notable advocate of social reforms, campaigning against poor housing and sanitation^{1.109}, and exposing local corruption and hypocrisy through the columns of his newspaper. He was no deferential respecter of rank or privilege where he felt that individuals abused their positions of power and relative wealth. The *Cambrian News* of 10 Jan 1879 carried a typically barbed Gibson observation:

‘ . . . Llanfihangel Geneu’r Glyn – Seasonable help – Sir Pryse Pryse, Bart, has sent the Rev Mr Davies, vicar of the parish, £5 to distribute amongst the poorest of the parishioners. Help of this kind was never more urgently needed. . . ’

Lewis, however, suggests that Gibson’s style may have been counter-productive; he talks of a dislike for Gibson’s ‘merciless, never-ending criticism’^{1.110}. Aberystwyth was the location of several printers, publishers and

1.109 Jones, A, 1994. Sir John Gibson and the *Cambrian News*. *Ceredigion*, 12, (2), 57-83

1.110 Lewis, W J, 1980. *Born on a Perilous Rock. Aberystwyth Past and Present*. Aberystwyth: Cambrian News, 120. ISBN 0900439041

booksellers. There were also branches of the commercial banks, and legal and accountancy practices in addition to insurance agents, architects, county court and register office^{1.111}. The county police headquarters was located in the town though the county assizes were held at Lampeter^{1.112}. Aberystwyth Barracks was the base for a militia regiment of the Royal Artillery. Lewis^{1.113} has suggested that the military connection still persists in the name of the street called North Parade. This subject is covered in more detail in chapter 8. Outside the main urban centre the rural parishes could demonstrate that they were self-sufficient, up to a point. In fact, they had access to a range of services and facilities that seem quite remarkable to a twenty-first century observer.

Kelly^{1.114} reports that Llanilar parish, with a population of 714, had a railway station, post office, two grocers' shops, general store, joiner, blacksmith, tailor, shoe maker, the Falcon Arms public house, and a surgeon, Dr J E Hughes, who was also medical officer of health. The parish of Ysbyty Ystwyth^{1.115}, with a population of 711, could boast a school, two chapels, five public houses, six grocers, draper, post office, and Dr John Morgan, surgeon, medical officer and public vaccinator. Other local businesses listed in Kelly include three water millers at Llanfihangel Geneu'r Glyn, and two car

1.111 In due course, Aberystwyth was to develop into a regional centre in addition to providing county-level functions through the establishment of the University College, the National Library, national office of the Forestry Commission and other institutions.(see Watson, E, 1965. *The West Coast Region In: Bowen, E G, ed. Wales: A Physical, Historical and Regional Geography*. London: Methuen, 304.

1.112 Morgan, G, 2006. *Ceredigion: a Wealth of History*. Llandysul: Gomer Press, 210. ISBN 1843235013

1.113 Lewis, W J, 1980. *Born on a Perilous Rock. Aberystwyth Past and Present*. Aberystwyth: Cambrian News, 213. ISBN 0900439041

1.114 *Kelly's Directory of South Wales 1895*. London: Kelly & Co, 447

1.115 *ibid*, 790-791

proprietors, aerated water manufacturer, cabinet maker, flannel weaver and veterinary surgeon in Llanbadarn Fawr.

1.3 Administrative structure of the study area

The study area, in terms of administrative units, includes the entire registration district of Aberystwyth together with the Gwnnws sub-district within the registration district of Tregaron, plus the parish of Eglwys Fach which falls within the registration district of Machynlleth, County of Montgomeryshire. This study is concerned with the northern part of the ancient or geographical County of Cardiganshire now called Ceredigion. It should be noted that the selected area, as defined thus, is very different to the Registration County of Cardiganshire. This latter administrative entity has been used for some other studies. In 1891 it included some twenty or more parishes which form part of the geographical counties of Carmarthenshire and Pembrokeshire. For example^{1.116}, the parishes of Eglwyswrw in Pembrokeshire, and Llanybydder, in Carmarthenshire, have been included in some studies of Cardiganshire. This is an important practical distinction to be made at the outset. The inclusion of these additional, external, parishes means that the true population of the county is inflated by some 20 000 subjects, with the result that comparisons between this present work and some other studies may be rendered difficult or impossible. So, care is

1.116 Jones, D, 1998. *Statistical evidence relating to the Welsh language 1801-1911. Tystiolaeth Ystadegol yn ymwneud â'r iaith Gymraeg 1801-1911*. Cardiff: University of Wales Press, 182. ISBN 0708314600

needed if the data presented here are to be compared with other studies. Dot Jones warns^{1.117}:

‘ . . . There are various pitfalls for the unwary in the interpretation of these figures. One is the different areas to which the county figures refer. . . .’

1.4 Structural and spatial description of the study area

The selected 1891 study area covers 22 parishes comprising sixty-two enumeration districts. The study region encompassing these sixty-two districts is populated by a total of over 24 000 subjects out of some 62 000 in the entire geographic county. The study represents a 100 per cent sample of some forty per cent of the geographic county population; see Table 1, below.

1.117 *ibid*, 160

Table 1

Registration Sub-District	Settlement, Parish or Township	Population in 1891	Area (acres)
Llanrhystud RG12/4557	Llanddeiniol	212	2022
	Llangwryfon	466	3925
	Llanilar	714	6429
	Rhostie	133	1313
	Llanrhystud	1161	8686
Aberystwyth RG12/4558 & RG12/4559	Aberystwyth	6725	845
	Broncastellan	139	508
	Clarach	160	1672
	Issa-yn-dre*	371	398
	Llanbadarn-y-Creuddyn Isaf	601	4981
	Llanbadarn Fawr	-	-
	Llanychaearn	471	1060
	Ucha-yn-dre*	368	398
	Faenor Isaf*	281	1148
	Faenor Uchaf*	337	1459
*townships within the Parish of Llanbadarn Fawr			
Geneu'r Glyn RG12/4560	Ceulan-a-Maesmor\$	692	7327
	Cyfoeth-y-Brenin\$	1003	2364
	Cynill Mawr\$	465	3746
	Elerch	174	4266
	Henllys\$	321	3679
	Llangynfelin	676	6556
	Llanfihangel Geneu'r Glyn	-	-
	Tiryrynach\$	290	2701
\$townships within the Parish of Llanfihangel Genau'r Glyn			
Rheidol RG12/4561	Cwmrheidol	878	13701
	Llanafan	381	2600
	Llanbadarn-y-Creuddyn Uchaf	418	9342
	Llanfihangel-y-Creuddyn	1799	22553
	Melindwr	678	8224
	Parsel Canol	366	2855
	Trefeurig	822	9488
	Ysbyty Cyfyn#	843	-
#area included in Cwmrheidol			
Gwnnws RG12/4562	Gwnnws Isaf	222	3381
	Gwnnws Uchaf	532	5857
	Lledrod Isaf	533	4312
	Lledrod Uchaf	351	4564
	Ysbyty Ystwyth	711	12816
	Ystrad Meurig	126	956
Machynlleth RG12/4586	Ysgubor-y-coed (Eglwys Fach)	418	10403
	Totals	24838	176535
County of Cardiganshire (estd)		62630	440630
Study Area as % of County		40	40

The local authority and administrative districts, as defined here in Table 1, and which make up the study area are:

1.4.1 Llanrhystud registration sub-district – includes parishes of Llanddeiniol, Llangwryfon, Llanilar, Llanrhystud and Rhostie – see Figure 8, below.



Figure 8 - Parishes in Llanrhystud registration sub-district

Kelly's Directory of 1895^{1.118} uses some data extracted from the 1891 Census noting that Llanilar in the Ystwyth valley had a station on the Manchester and Milford railway. The most notable resident of the parish was Mr Lewis Pugh Pugh, BA, DL, JP of Abermâd. The Earl of Lisburne was the principal

1.118 *Kelly's Directory of South Wales 1895*. London: Kelly & Co, 447-448

landowner, together with R J R Loxdale and G W Parry. The soil was clay and the principal crops were oats and barley. Kelly records that Abermâd was 'a fine mansion', designed by J P Seddon^{1.119}. Llangwryfon in the Wyre valley also had clay soils with the principal crops being oats and barley with some pasture^{1.120}. There the principal landowner was R J R Loxdale of Llanilar. In Llanrhystud parish, also on the Afon Wyre, Major John G Parry Hughes, of Allt-Ilwyd, lord of the manor, together with Lt-Col Alfred Glynn Begbie, R E, of Mabws, were the principal landowners^{1.121}. The soil was clay with wheat, barley, and oats under cultivation. There was a railway station on the Manchester and Milford line but this was some six miles to the north of the village at the somewhat meaningless location identified as 'Llanrhystud Road'. Kelly^{1.122} records two water mills; at Felinfawr, operated by David Evans, and at Rhiwbwys, operated by Evan Lewis. At Llanddeiniol the soil was clay with, mainly, oats being grown^{1.123}. At Rhostie the principal landowners were Lord Lisburne of Trawsgoed, R J C Loxdale and G W Parry. There^{1.124} the soil was chalky and the principal crops were barley and oats. In fact, the term 'barley belt' has been used to describe the area between Aberaeron and Llanrhystud^{1.125}.

1.119 Reference is made, elsewhere in the present work, to other schemes where John Pollard Seddon, 1827-1906, was involved.

1.120 *Kelly's Directory of South Wales 1895*. London: Kelly & Co, 443

1.121 J G P Hughes and A G Begbie were married, respectively, to sisters Elizabeth Charlotte Mary Lloyd-Philipps and Henrietta Edith Lloyd-Philipps, these being second cousins, twice-removed, to the present author. The step-mother to these two sisters was one Mary Laura Bonsall.

1.122 *Kelly's Directory of South Wales 1895*. London: Kelly & Co, 454

1.123 *ibid*, 377

1.124 *ibid*, 649

1.125 Benbough-Jackson, M, 2007. *Cardiganshire: A concise history*. Cardiff: University of Wales Press, 63. ISBN 9780708321119

The publication in 1872 of *The Return on Owners of Land* suggests that the total area of Cardiganshire was 391 685 acres. The principal landowners were: Earl of Lisburn of Crosswood (J D M Vaughan) 42 720 acres; Sir Pryse Pryse of Gogerddan 28 684 acres; Mr G E J Powell of Nanteos 21 933 acres; Mr J Waddingham of Hafod 10 963 acres; Mr L P Pugh of Abermâd 6 894 acres. These five estates, therefore, accounted for some 30 per cent of the land area of the entire county^{1.126}.

1.4.2 Aberystwyth Urban registration sub-district – Parishes of Holy Trinity and St Michael.

Aberystwyth Town was part of the Parish of Llanbadarn Fawr until the ecclesiastical Parish of St Michael was created in 1861. The adjacent Parish of Holy Trinity was created in 1887, only four years before the national census that provides the basis for this present study. The local government structure that existed in Ceredigion at the time of the 1891 Census is different, in terms of boundaries, to that which applied in 1881 and in 1901. The 1891 structure was created by the Local Government Act of 1888 but there were more significant changes introduced under the Local Government Act of 1894 when urban and rural district council structures were first created. Aberystwyth was the focal point for the region as an administrative and trading centre. The coming of railway in 1864 had improved access and boosted tourism. The parishes of St Michael and Holy Trinity came under the

1.126 Cahill, K, 2002. *Who owns Britain*. Edinburgh: Canongate, 308. ISBN 1841953105

the control of the Urban District Council whilst the parishes of Llanbadarn Fawr (including Issa Yndre and Ucha Yndre), Llangorwen and Llanychaearn formed part of the Rural District Council administrative area. These authorities existed from 1897 until the local government re-structuring of 1974^{1.127}.

1.4.3 Aberystwyth Rural registration sub-district – Parishes of Llanbadarn Fawr, Llangorwen and Llanychaearn – see Figure 9, below.



Figure 9 - Parishes in Aberystwyth Rural registration sub-district

1.127 Bowen, E G, 1979. *A History of Llanbadarn Fawr*. Llandysul: Gomer Press, 151-153. ISBN 0850885027

Kelly notes that the parish of Llangorwen^{1.128} included the townships of Broncastellan, Bow Street and Clarach. There was a station on the Cambrian Railways line at Bow Street. The principal landowner was Sir Pryse Pryse of Gogerddan. The soil was sand and gravel, and wheat, barley and oats were grown. At Llanychaeam^{1.129} the soil was clay, with wheat, barley and potatoes being grown. The principal landowners were W B Powell of Nanteos, Morris Davies, and M L V Davies, D L, J P, of Tan-y-Bwlch. Mr Matthew L V Davies kept a pack of foxhounds on his estate at Tan-y-Bwlch. Other named local residents included Captain Thomas Powell Lewes of Ffosrhydygaled (now Conrah Country House Hotel), and John Morgan – ‘collector of Queen’s taxes, assistant overseer and school attendance officer’. Llanbadarn Fawr^{1.130} was a geographically extensive parish which included settlements ranging from the boundary of Aberystwyth Town eastwards along the Rheidol valley. These settlements included Issa-yn-dre and Ucha-yn-dre, which formed the village of Llanbadarn Fawr, Cwmrheidol, Llanbadarn-y-Creuddyn Isaf, Llanbadarn-y-Creuddyn Uchaf, Trefeurig, Faenor Isaf and Faenor Uchaf. Faenor Isaf included Penglais and the Union Workhouse. A few years before the 1891 Census the Parish Church of St Padarn had been restored by J P Seddon. The lord of the manor was W B Powell of Nanteos and the principal landowners included the Earl of Lisburne and Sir William Pryse Pryse of Gogerddan. Residents with commercial interests included William Evans, thrashing machine proprietor, John D Roberts, veterinary surgeon, and

1.128 *Kelly's Directory of South Wales 1895*. London: Kelly & Co, 440.

1.129 *ibid*, 477

1.130 *ibid*, 363-366



Figure 10 - Quebec Row, Llanbadarn Fawr^{1.131}

James Hughes, flannel weaver, all of Llanbadarn Fawr, Thomas Jones, water miller, Ponterwyd, and Richard Hughes, farmer of Brynamlwg, Penglais. Thirteen subjects connected with Faenor Uchaf are identified as cowkeepers.

1.4.4 Genau'r Glyn registration sub-district - Parishes of Llanfihangel Genau'r Glyn and Llangynfelin – see Figure 11, below.

Kelly records that^{1.132} Llanfihangel Genau'r Glyn also was an extensive parish that included the settlements of Borth, Ceulan-y-Maesmawr, Cyfoeth y Brenin, Cynill Mawr, Elerch, Henllys, Tal-y-bont, and Tirymynach. There were railway stations at Borth, and at Llanfihangel, later renamed Llandre. In the

1.131 Quebec Row, Issa-yn-dre, circa 1925. The single-storey cottages behind the milk float (Mr Davies, Padarn Dairy – the float is now in Amgueddfa Ceredigion) are where James Hughes, flannel weaver, lived and worked. Note the lack of road traffic. The churchyard boundary wall is on the right of the photograph.

1.132 *Kelly's Directory of South Wales 1895*. London: Kelly & Co, 426-427

summary description for each parish Kelly lists the names and addresses of 'private' residents. These private residents were not commercial subjects or farmers but included landowners, gentry, clergymen, ministers and persons of



Figure 11 - Parishes in Genau'r Glyn registration sub-district

independent means – the local 'great and good'. One private resident of Borth was Lt-Col Robert Feilden. Col Feilden held a permit allowing him to follow the railway line across the bog for wild-fowl shooting in the Dyfi estuary. Green^{1.133} records that, in August 1910, whilst walking along the line north of Borth, Col Feilden suffered a fatal accident when he tripped and fell under an

1.133 Green, C C, 1993. *The Coast Lines of the Cambrian Railways Volume 1*. Didcot: Wild Swan Publications, 113. ISBN 1874103070

approaching locomotive. Kelly notes that barley, oats and wheat were cultivated with some land down to pasture. Reference is made to lead mining and to woollen factories at Tal-y-Bont. The principal landowners included Sir Pryse Pryse of Gogerddan, and Rev Lewis Gilbertson (who built St Peter's Church, Elerch). Llangynfelyn parish was served by Ynyslas station, located just east of the diverted Afon Leri. This was the site of a branch line off the Cambrian Railways main line. This branch^{1.134} was a short extension northwards to a wharf where a paddle-steamer operated a (short-lived) service across the Dyfi estuary to Aberdyfi. Kelly^{1.135} reported that the soil was clayey and the main crops were wheat, barley and oats. The principal landowners were Sir Pryse Pryse (of Gogerddan), and Rt Rev William Basil Jones, Lord Bishop of St David's, who resided at Gwynfryn in the parish.

1.4.5 Rheidol registration sub-district – Parishes and townships of Cwmrheidol with Ysbyty Cynfyn, Llanafan, Llanfihangel-y-Creuddyn, Melindwr (Capel Bangor) with Parsel Canol, and Trefeurig – see Figure 12, below.

At the time of the present study Cwmrheidol, Llanbadarn-y-Creuddyn Isaf, Llanbadarn-y-Creuddyn Uchaf and Trefeurig lay within the ecclesiastical parish of Llanbadarn Fawr but were subsequently established as civil parishes in 1894. However, in 1891 these communities, rather confusingly it may be said, were covered by Rheidol sub-district. These differences

1.134 *ibid*, 116-126

1.135 *Kelly's Directory of South Wales 1895*. London: Kelly & Co, 370



Figure 12 - Parishes in Rheidol registration sub-district

between ecclesiastical and civil parish boundaries are further discussed in section 1.5, below. Llanafan parish was situated in the Ystwyth valley and included the noted estate of Trawscoed (or Crosswood), home of the Earl of Lisburne, one of the dominant landowners of the area. Kelly^{1.136} notes that the soil was light loam and that the principal crops were oats, barley and 'roots'. There was a station on the Manchester and Milford line at Trawscoed. Local residents named by Kelly included: William Dodd, farm bailiff; Robert Gardiner, agent; David Jones, forester; James Morgan, gamekeeper; and

1.136 *ibid*, 361

Richard Charles Williams, gardener; all these subjects being employed on the Trawscoed estate. Melindwr (or Capel Bangor), with the townships of Parcel Canol and Goginan, lies in the Rheidol valley, east of Aberystwyth. Kelly^{1.137} does not report on agricultural activities, referring simply to three small woollen factories and abandoned lead mines. One of the principal landowners was, again, Sir Pryse Pryse. Llanfihangel-y-Creuddyn parish included the recognized tourist attractions of Devil's Bridge and the Mynach Falls. Kelly^{1.138} recorded that the soil was a light loam over shale; the chief crops were oats and barley. The principal landowners included Lord Lisburne, W B Powell, Nanteos, and John William George Bonsall, Fronfraith. At Trefeurig there were two operating lead mines; the soil was clay and chiefly under grass.

1.4.6 Gwnnws registration sub-district – Parishes of Gwnnws, Lledrod, Ysbyty Ystwyth and Ystrad Meurig – see Figure 13, below.

Gwnnws parish (which Kelly^{1.139} refers to as Llanwnws) situated just north of Tregaron, was served by Strata Florida station on the Manchester and Milford line. The principal landowners were the Earl of Lisburne and T J Waddingham, Esq, of Hafod. The soil was clay with the chief crops being oats and barley. In Lledrod parish^{1.140}, the principal landowner was, again, Lord Lisburne. The soil there was clay with the chief crops being barley and oats

1.137 *ibid*, 496-497

1.138 *ibid*, 424

1.139 *ibid*, 364

1.140 *ibid*, 471



Figure 13 - Parishes in Gwnnws registration sub-district

but with most of the land being down to pasture. Ysbyty Ystwyth was situated on the Afon Ystwyth. In that parish Lord Lisburne was lord of the manor and principal landowner and the chief crops were barley and oats. Kelly^{1.141} reported that there were five public houses in the village – the Star (Thomas Howells), the Bear (Mrs Jane Kemp), the Miners' Arms (Mrs Mary Lloyd), the Black Lion (John Messer), and the Lisburne Arms (John Messer Jnr). Kelly noted that^{1.142} in 1895 the parish church of St John the Baptist at Ystrad Meurig was not in use and that services were being held in the Grammar School. Further information records that this once-famous school was founded in the eighteenth century, was equipped with a library, managed by a board of trustees and provided for thirty-two boys. In this parish Lord Lisburne was also lord of the manor and principal landowner. The chief crops were, again, barley and oats with most of the land being down to pasture.

1.141 *ibid*, 790-791

1.142 *ibid*, 790

1.4.7 Machynlleth registration sub-district – Parish of Ysgubor-y-coed (Eglwys Fach) - see Figure 11, above.

This parish was served by Glan Dyfi Station on the Cambrian Railways line from Machynlleth to Aberystwyth. Kelly^{1.143} notes that there was a large slate quarry in the parish. Sir Pryse Pryse was lord of the manor and chief landowner. The soil was peat and clay, on subsoil of sand and the chief crops were wheat, barley, oats and turnips.

1.5 Composition of constituent parishes within the study area

The boundaries and composition of ecclesiastical and civil parishes have evolved and changed over the years. Ancient ecclesiastical parishes have, over time, been sub-divided with newer, geographically smaller, entities being created. At one time the Parish of Llanbadarn Fawr, Ceredigion, was the largest of any in England and Wales. In the Middle Ages the church of St Padarn at Llanbadarn Fawr, Ceredigion, was the focal point of an area covering some 600 square kilometres. Then, over time, this large area of land became sub-divided into thirty-two smaller ecclesiastical parishes^{1.144}. The arrangement and identification of civil and ecclesiastical parishes across the study area is not simple or straightforward. The evolution of these entities has been a dynamic process with boundaries being re-drawn and new

1.143 *ibid*, 671

1.144 Bowen, E G, 1979. *A History of Llanbadarn Fawr*. Llandysul: Gomer Press, 48. ISBN 0850885027

administrative structures being created, amalgamated or dissolved. This process has, at county level, continued into the latter part of the twentieth century. The resulting difficulties confronting present-day students of local history are not recent phenomena^{1.145}.

In selecting and identifying the twenty-two parishes covered by this study a great deal of care has been devoted to ensuring that these localities are characterized by unique population counts. Whilst the names, identities and characteristics of the study areas may suffer from certain ambiguities resulting from changes over time, the populations attributed here to those units that existed in April 1891 are valid. Having noted the difficulties in defining the administrative units comprising the study area there is no justification for suspecting that there is either overlap or double-counting between population groups and communities, or that whole sections of settlements may have been omitted from the original enumerators' books. In arithmetic terms the source data are robust. The preliminary work in assembling the data that underpins this study has involved patient and careful assessment and auditing to ensure the integrity of the 100 per cent sample. The same cannot be said of some other studies or, even, of official reports. This point has been made in section 1.3, above. For Aberystwyth Registration sub-district in 1891 Dot Jones reports a population figure of 9453^{1.146}. That value, cited in the official summary tables, can be confirmed by totalling the figures reported in the tables separately compiled by each of the thirteen

1.145 Jones, D, 1998. *Statistical evidence relating to the Welsh language 1801-1911. Tystiolaeth Ystadegol yn ymwneud â'r Iaith Gymraeg 1801-1911*. Cardiff: University of Wales Press, 183. ISBN 0708314600

1.146 *ibid*, 60

enumerators. However the official summary tables disguise the fact that the last four pages of the transcribed enumerator's book for District 5, Aberystwyth St Michael, appear to have become detached from the back of the book and lost at some point after the 1891 Census returns were consolidated, analysed and reported by the London Census Office. This means that the present study covers 1073 subjects; this is 99 fewer than the official figure of 1172 for Aberystwyth, St Michael.

1.6 Conclusions

This introductory chapter sets out the historical background to the study and reviews a wide range of published sources before providing a contemporary description of the parishes covered by the study area. That is followed by an explanation of the administrative structure that existed at the time of the study. Further chapters of this dissertation deal with the methodology of the project, and describe the mechanisms involved in capturing the raw data through the census system together with the associated strengths and weaknesses. This is followed by a study of personal names, gender ratios, age distributions, places of birth and mobility, language ability, the disadvantaged, and occupations. The study aims to extend and develop the work of earlier researchers in the context of the contemporary social framework alongside the economic pressures and agents for structural change as reflected in contemporary trading, industrial and commercial structures.

Chapter 2 – The UK Census of 1891

2.1 Introduction

Chapter 1 described the topographical features, communities, economy and cultural characteristics of the study area and summarised the history of the locality in the years leading up to 1891. This second chapter presents a critical discussion of relevant source material highlighting strengths and weaknesses. Previous census studies are reviewed in order to show how this present work offers new insights into the lives of the subjects associated with the study area. Some selected studies involving analysis of census data by other writers are examined and compared. The mechanisms required for taking a Victorian census are described with particular reference to the census in Wales in April 1891. The transcription of the raw data into an alphanumeric database is explained, before considering some aspects of quantitative methods of historical analysis.

2.2 Nineteenth century censuses in England and Wales

The most obvious drawback with any UK census is that the returns are but a ‘snap-shot’ of one night in ten years. Nevertheless they have potential as a unique and valuable historical record. It is the case that census returns carry a lot of fine detail about individual subjects (for example age, marital status, parish of birth and occupation) across all social classes and not just for the

clergy, the gentry and the local citizens of note. Census returns can be a source of intimate socio-economic information for each community. Finally, attention is given to the design of questions that might reasonably be formulated and applied indirectly to the database in order compare, contrast, extend and develop the work of earlier researchers.

Censuses have been undertaken for several thousand years. A census of England and Wales was undertaken on 5 April 1891 and a defined sub-set of the enumerators' returns for that census was selected as the primary source material for this study. A census of England and Wales, of Scotland and of Ireland was taken every ten years starting in 1801. The earlier returns, up to and including 1831, consisted of simple numerical counts gathered to provide measures of population and other social statistics required by central government. Starting with the census of 1841 the nature of the exercise changed when the range of details collected from households was extended and a higher level of precision was introduced. The transcribed and collated returns, in the form of the enumerators' books, were preserved after the statistical summaries had been prepared and published.

2.3 Administration of the census

The General Register Office (GRO) based in London was charged with the responsibility for census taking from 1840²⁻¹. Every ten years the GRO had to create the mechanism for carrying-out a census; the Census (England and

2.1 Higgs, E, 1991. *Making Sense of the Census*. London: HMSO, 7-8. ISBN 0114402191

Wales) Act of 1890 authorised the GRO to create the necessary, but temporary, machinery to manage the 1891 census. The GRO was required to liaise with local administrators and devise a central system for processing the returns; this temporary structure had to be resurrected every ten years^{2.2}. The Census Office was not a permanent institution.

At the local level, superintendent registrars had to consider any boundary changes, review their plans for managing enumeration districts within their registration districts and sub-districts, and appoint an enumerator for each enumeration district. Enumerators were temporary, paid, officials who were selected on the grounds that they were reliable and respectable, literate and numerate, and physically fit^{2.3}. They were to be such a person as ‘... to deserve the goodwill of his district...’.

Each superintendent registrar’s district was divided into sub-districts with each sub-district being further divided into enumeration districts. The sub-district of Llanrhystud was, for example, comprised of five parishes divided across twelve enumeration districts. See Table 1, above.

The territory or ground covered by each enumeration district varied greatly. An urban or city district might be quite compact but could include a relatively large number of residents. A rural enumeration district might cover a large but thinly populated area. As a rule-of-thumb, the size of a district was the distance a man could cover in one day to collect the completed schedules from each household. This distance was held to be not more than fifteen

2.2 *ibid*, 11

2.3 *ibid*, 12

miles in a rural area^{2.4}. An enumeration district could cover one parish or part of a parish or an array of dispersed townships within a parish. For the purpose of administration of the census a parish was a civil parish which might not necessarily be contiguous with the corresponding ecclesiastical parish. The civil parish was a component within the system of Poor Law administration.

In 1891 census night was Sunday, 5 April. (Census night is always a Sunday). In the days leading up to census night the enumerator would walk, or ride, over his or her allocated district delivering schedules to all the households. Every person in the house on census night had to be included on the schedule. Absent persons were not to be recorded but travellers or night-shift workers were included at the next stop on their journey, or when they returned home from work. Addresses with multiple occupancies had to be noted and the various households separated. Occupants of identified institutions (workhouse, college, barracks, etc) were recorded on special schedules which were then included with the normal household returns. There were special arrangements for crew and passengers on-board ship^{2.5}.

Throughout the Monday following census night the enumerator would tour his, or her, district collecting the completed schedules. If there were gaps on the householders form then the enumerator had to interrogate the occupants and add the missing details. When all the schedules had been collected, the enumerator was required to copy out the information cited on the individual householders' forms into one Book. After checking and correcting any errors,

2.4 *ibid*, 32

2.5 *ibid*, 37-46

the superintendent registrar forwarded these Census Enumerators' Books (CEBs) on to the Census Office in London. There, the key statistics were extracted, summarised and published in tabular form and the household schedules were destroyed. The summary census tables are not directly relevant to the present study. The transcribed Census Enumerators' Books are preserved at the National Archives (TNA).

It may be imagined that the process of collecting the data did not always produce the most consistent, accurate and reliable results. This was especially so where the householder could not read or write, or understand or speak English, followed by further scope for error when the enumerator was transcribing the hand-written householder schedules.

Although the original household schedules were destroyed, the CEBs with the transcribed data have been preserved. Because they contain personal information on named individuals the records are subject to a one hundred year secrecy rule so the full records, in the form of the CEBs, for the 1891 Census of England and Wales were not opened to public scrutiny until 2 January 1992. Filmed or digitised page images of the CEBs are publicly available through various media – microfilm, microfiche, CD-ROM and online. For some census years whole books or some pages from the books have been lost. However, the 1891 Census returns for Cardiganshire are almost complete and the handwriting is, generally, quite legible.

In this present study, where records were incomplete or abbreviated or illegible, various interventions have been used to improve the quality of the data and achieve an acceptable standard required for computer processing of

the information. It should be noted that this approach runs counter to the accepted practice for transcribers of census records which requires that the data are copied out 'as-read' with no attempt to correct any perceived errors. Here an 'added-value' approach was applied and many raw entries were adjusted in order to achieve consistency and facilitate comparative analysis. These adjustments were applied when the raw data were typed into the fields within the structured database. Because the database was used to search for numbers of records satisfying pre-set criteria it was necessary to adjust the data at the in-putting stage in order to achieve consistency. It was not possible to search for records using a fuzzy logic approach. For example, some place-names can present with variable spellings, so Scybor-y-Coed and Ysgubor-y-coed would not, in raw form, be placed together in a sorted alphabetical listing. Where such variations were encountered in the raw data it was necessary to use an 'authority list'. For place-names this was an appropriate, recognised gazetteer^{2.6}. Victorian census returns have some acknowledged defects; occupations of women were not always properly recorded as they were not seen as major contributors to household income^{2.7}. It is probable that some recorded information may, at the level of the individual, lack precision in absolute terms. Some subjects may not have been entirely frank in reporting their age. District boundary changes between census years mean that it can be difficult to make comparative assessments of the characteristics of communities over time.

2.6 Davies, E, ed, 1967. *Rhestr o Enwau Lleoedd - A Gazetteer of Welsh Place-names*. Cardiff: University of Wales Press. ISBN 0708310389

2.7 Hudson, P, 2000. *History by Numbers. An introduction to quantitative approaches*. London: Arnold, 14. ISBN 0340614684

2.4 Review of previous studies involving analysis of census data

A number of writers have considered the limitations of the use of information reported in CEBs whilst highlighting the novel features of the data that they contain. Through a study of the 1851 to 1881 census summary reports, Mills^{2.8} attempted an interpretation of farm statistics describing sizes of holdings and numbers of employees. Then, by using the detailed descriptions provided in CEBs a model was developed that attempted to address the way in which farmers incorporated members of their own families in the labour force. This is a recognized problem where the junior members of a farming household are described, in the census returns, as 'Farmer's son' or 'Farmer's daughter'. There is a lack of clarity over such individuals, both single and married, in terms of their perceived status. Were they, for example, in receipt of the wages? Were these the basic wages paid to an agricultural labourer, or to a dairymaid or to a more skilled worker such as a ploughman? Reference is made, in passing, to a further study in south Cardiganshire^{2.9} where the reported labour force data are suspected of being incomplete and inadequate. That same study is also cited to show that many Cardiganshire farmers simply did not bother to report on the sizes of their holdings^{2.10}. Mills suggests that farmers who were tenants may not have felt they had a responsibility to report on the acreages that they worked. After a detailed

2.8 Mills, D R, 1999. Trouble with farms at the Census Office: an evaluation of farm statistics from the censuses of 1851-1881 in England and Wales. *Agricultural History Review*, 47, (1), 58-77

2.9 *ibid*, 63

2.10 *ibid*, 88

consideration of these issues and after citing a range of examples extracted from CEBs, Mills comments^{2.11}:

‘ . . . The reader may be forgiven for thinking that the farm data in the census reports are quite without value. It is true that only a handful of historians have made significant use of them. . . .’

He then concedes that the Census Office had a somewhat ambivalent view on the reporting of derived agricultural statistics and ‘in 1881 absolutely no use was made of the data collected’^{2.12}.

Higgs^{2.13} has pointed out that, by 1891, there was no requirement to report this information. Pryce^{2.14} considered the use of census returns by students of local community studies:

‘ . . . When interpreted within interdisciplinary frameworks – an integration, perhaps, of historical, sociological and geographical approaches – it is clear that the census constitutes one of the richest and potentially one of the most invaluable of sources for detailed local studies’

His study was one of the first to show how CEBs could be used for a broad and descriptive survey of the socio-economic characteristics of a region. It does not claim to provide a quantitative analysis of the data, and explains how CEBs should be used in conjunction with other documentary sources for the study of demographic trends. Use is made of illustrative examples to describe some features of selected communities. Pryce had access to the census returns for the years 1841, 1851, 1861 and 1871. He discussed the accuracy and reliability of the returns and cited examples for families and

2.11 *ibid*, 69

2.12 *ibid*, 72

2.13 Higgs, E, 1991. *Making Sense of the Census*. London: HMSO, 87. ISBN 0114402191

2.14 Pryce, W T R, 1973-74. The census as a major source for the study of Flintshire society in the nineteenth century. *Journal of the Flintshire Historical Society*, 26, 114-142

and households across the social spectrum. Pryce explains the arrangement of the returns, the use of contemporary maps as an aid in locating households at a time when transcriptions and name indexes had not been created to provide effective coverage, interpretation of reported occupations, and patterns of migration.

Walker^{2.15} investigated the impact of the movement of agricultural workers from rural areas in the context of decline of individual rural parishes and small market towns. He undertook a demographic and economic study to analyse change and decline in terms of population, migration, occupation and socio-economic groupings for four small West Devon market town parishes. The data from the manuscript census returns (CEBs) were analysed though no information is given on the procedures and techniques used in making the calculations and arriving at the results. Walker showed that populations of two towns and parish hinterlands declined sharply between 1841 and 1891, one town stagnated and one town, which was served by the railway, increased in population.

He reviewed the accuracy of the data reported in CEBs with possible errors attributed to cases where no-one in a family could either write or understand the nature of the schedule and its use. Other possible inaccuracies were attributed to problems with determining the identity of family heads, and of lodgers and visitors. There were uncertainties with shared houses, and with addresses, ages and occupations, particularly farmers, women and servants

2.15 Walker, P, 2001. *Decline and change in some West Devon market town parishes, 1841-1891*. Thesis (PhD) University of Exeter

and those persons with no occupation^{2.16}. The degree of under-reporting of female occupations in the West Devon study was not known.

Walker refers to points raised by other researchers concerning errors arising from uncertainties over the roles of female relatives of farmers, the contributions from members of the families of agricultural labourers, potentially un-recorded female workers, and the lack of sub-division of 'general' female servants and of 'general' labourers. There is some discussion on the use of directories as sources of information on occupations. Walker suggests that 'it would be unwise to use directories as the sole primary source in any comparative study without using the CEBs as the major source. The directories consulted have provided useful corroborative data and descriptive details not readily available elsewhere^{2.17}.

Some encouragement may be derived from his findings that CEBs were relatively free from errors generated by householders and enumerators. Example of minor errors included a few cases of incorrect marital status, males under 10 years of age being described as married, mistakes in reported gender and some age discrepancies. Walker declares that the indicated status of workers as masters or journeymen or apprentices was generally clear.

Walker observed that the main weakness found with CEBs was the number of cases in which farm acreage and numbers of farm workers employed were not stated with an almost complete lack of addresses other than street

2.16 *ibid*, 39

2.17 *ibid*, 41-45

names^{2.18}. However, that first observation is not really relevant to the present study as the requirement to report on the acreage of farms or the numbers of labourers employed had been abandoned by 1891.

Using datasets produced by sampled extracts from CEBs, Woollard^{2.19} studied changes in male employment between 1851 and 1881. The emphasis was on changes in the occupations of men through the course of their working lives, with particular reference to the retirement of older men. This study also attempted an examination of the relationship between structural changes in the economy and the nature of occupations and the capacity of older men to deal with technological changes.

The use of census returns in conjunction with other documentary sources of household and family data has been explained. Anderson^{2.20} has described studies on family structure as a tool for improving understanding of industrialization and urbanization in Victorian England. The use of supporting descriptive material in conjunction with the more systematized detail available through census returns is highlighted. Anderson also emphasizes a need to examine data on family structures over extended periods of time in order to exclude the effects of sudden and short-term conditions such as outbreaks of disease; his study is concerned with change over time.

He says:

...it is unwise to attempt any study of gradual change in patterns of family behaviour over periods of less than 50 years...,

2.18 *ibid*, 45

2.19 Woollard, M, 2002. The employment and retirement of older men, 1851-1881: further evidence from the census. *Continuity and Change*, 17, (3), 437-463

2.20 Anderson, M, 1972a. The study of family structure. *In: Wrigley, E A, ed. Nineteenth-century society: Essays in the use of quantitative methods for the study of social data.* Cambridge: Cambridge University Press, chapter 2, 47–81. ISBN 0521084121

but also:

...it is best to concentrate in detail on a small span of time, attempting to link individuals between censuses and to other data sources, and making an intensive search for literary background material....

Harvey and Press^{2.21} describe when and how records and datasets from a range of primary sources can be linked. It has been suggested that census records be linked to parish registers, for example, together with poll books and trade directories. That is not an approach that has been considered for the present study where the linked sources cited above are probably not appropriate for all sections of society in Ceredigion, especially the majority for which the Church was not responsible.

Anderson also discusses the risks inherent in sampling household data and describes the use of 80-column cards for encoding and sorting data^{2.22}. The data extracted from the census returns were supplemented by, for example, assumptions taken from standard wage rates in order to estimate aggregate family income. Patterns of kinship and migration were studied as well as possible responses to sudden domestic crises. He points out that some features of family structure cannot be explored through census returns alone. For example, elderly persons living alone who may, or may not have living children, either locally or at some distance away. When children married and left home how far did they move – to the next street or to the next town, or county?

2.21 Harvey, C and Press, J, 1996. *Databases in Historical Research*. Basingstoke: Macmillan Press, 234-252. ISBN 0333568443

2.22 Anderson, M, 1972a. The study of family structure. *In: Wrigley, E A, ed. Nineteenth-century society: Essays in the use of quantitative methods for the study of social data*. Cambridge: Cambridge University Press, chapter 2, 53-55. ISBN 0521084121

Anderson^{2.23} has also noted how census returns may be used to look into more complex relationships where individual subjects can be categorized across a different number of variables. For example, not just the number of lodgers in a community but the number of lodgers who may also be migrants *and* bachelors. He has suggested that the integrity and utility of the raw data can be protected by adopting clearly stated ways of classifying the variables attributed to subjects as found in the census returns. He supports his case for applying a disciplined approach to the extraction of data by considering the definition of a house, a household, the head of a household, and the status of co-residing groups such as lodgers and servants.

Gordon and Nair^{2.24} have reported on a study undertaken on some 250 households in a middle-class area within the City of Glasgow. Details of family structures were extracted from census returns for 1851 through to 1891 and analysed using a Microsoft Access database. The population in the sample area varied from 1 661 in 1851 to 1 905 in 1891. The study was particularly concerned with the domestic role and status of women in Victorian business, commercial and professional society in a major city. It was shown that both married and single women played a dominant social and economic role. The urbanized society studied in Glasgow would be very different to that found in rural communities in Ceredigion.

Another study of a Scottish community, albeit a small, relatively isolated

2.23 Anderson, M, 1972b. Standard tabulation procedures for the census enumerators' book 1851-1891. *In: Wrigley, E A, ed. Nineteenth-century society: Essays in the use of quantitative methods for the study of social data.* Cambridge: Cambridge University Press, chapter 4, 134–145. ISBN 0521084121

2.24 Gordon, E and Nair, G, 2002. The myth of the Victorian patriarchal family. *History of the Family*, 7, 125-138

settlement, quite unlike that found in Glasgow was reported by Comber^{2.25}. She conducted a study of marital fertility within the cotton mill community of New Lanark in the second half of the nineteenth century. The aim was to determine if there was any connection between fertility and employment of women in a textile industry. The sources studied included census enumerators' returns between 1851 and 1891, statutory registers, parish records, and births, marriages and deaths registers maintained by the owners of New Lanark. It was acknowledged that this small town was rather a special case due to the historical links with Robert Owen and the consequent atypical level of recorded information associated with and resulting from his enlightened management style. Using this approach it was possible to track population changes over time (there were 673 subjects enumerated in 1891), together with gender ratio, marital status and age structure, household size and composition, and occupational change.

The starting point for the study was the 1851 Census with all the returns from the five (1851 to 1891) New Lanark censuses transcribed from microfilm into a Microsoft Excel spreadsheet. Each census was linked to the next with 1851 linked to 1861, 1861 to 1871, and so on. The returns were merged to form one Excel database and the merged file (containing 3 271 records) then sorted by surname, Christian name and age. This produced an alphabetical listing with records of the same name being displayed in age order. Each record for each subject was given a unique seven digit identifier, for example, 5117903 – denoting 1851 census, schedule no 179 and the third person in

2.25 Comber, R E, 1997. *Nineteenth Century Fertility in a Scottish Textile Community: The Case of New Lanark*. Thesis (PhD) University of Leeds

the household^{2.26}.

Using Old Parish Registers (these being the records of births and baptisms, banns and marriages and deaths and burials kept by individual parishes of the Established Church of Scotland before the introduction of civil registration in that country in 1855), company records and statutory registration information it was possible to supplement a married couple's census records with details of marriage, birth dates of children, birth dates of children not recorded in the census, when and how they and their children died and when and who the children married. This linked dataset was then imported into a Microsoft Access relational database. Comber obtained results for analyses of living arrangements, occupational structures and mean age at first marriage. Although this was clearly a most elegant study in terms of its conception and execution it was concluded that there was no difference in fertility between female mill workers and housewives.

Another researcher using Microsoft Access as an analytical tool was Price^{2.27} who conducted a study of coal-mining communities in the Garw Valley using information extracted from census returns to examine population movement and social composition. The aim was to inform on where the subjects within the population came from and how the community was structured in terms of nationality, gender, age, language ability and employment status. Much of the study was concerned with organisational changes in coal mining and with the development of labour relations structures within the industry.

2.26 *ibid*, chapter 4

2.27 Price, W M, 2000. *Aspects of urban history of the Garw Valley, 1870-1914*. Thesis (PhD) University of Wales, Cardiff

Price used statistical analysis of census data. The statistics for the study were processed using a Microsoft Access relational database which involved creating a record for each of 7 505 individuals recorded on the censuses of 1841 to 1891 for the study area. The data fields recorded information on each subject, defined by age, gender, occupation, parish of birth, county of birth, marital status, relationship to head of household, and language ability. Results were presented in tabular form for average age and marital status.

Barber^{2.28} reviewed a wide range of sources, resources and research tools likely to be of value to family historians and used a computer package called Cardbox Plus to analyse the data. These primary sources included, for example, pedigree books, Great Sessions records, personal papers, diaries, estates papers, bills and receipts, family Bibles, tithe maps, sales catalogues, and photographs. Census returns formed only a small part of this study. Barber considered the use of census returns only as a tool for tracing a particular family through the nineteenth century forward from 1841. Her project was based around a case study involving research into the family history of Parry of Llidiardau, in the Parish of Llanilar. One of the most significant sources used by Barber was an uncatalogued collection of family papers, the Llidiardau Mss, at the National Library of Wales (NLW). This collection amounted to nearly 10 000 documents^{2.29}. Using Cardbox Plus information was recorded about each document under the headings: date, format, document reference, names, places and subjects. Information could

2.28 Barber, B J, 1994. *Sources for Family History: A case study with particular reference to Wales, The Parrys of Llidiardau*. Thesis (PhD) University of Wales, Aberystwyth
2.29 *ibid*, 15

then be retrieved and analysed under any one heading, or a combination of two or more. However, Barber states that difficulties encountered in the use of this software tool proved significant and that it was not thought to be suitable for public access. The difficulties alluded to included inflexible record design within the database, identification of individuals of the same name, and variations in the spelling of place names and of personal names^{2.30}. It has been argued, previously, that those problems were anticipated and avoided in the present study.

Docherty^{2.31} has studied residential differentiation, meaning the evolution of distinct or segregated neighbourhoods, recognizable by their characteristic socio-economic and/or ethnic identities and population mobility in two small Scottish towns, Dumbarton and the Vale of Leven, between 1861 to 1891. The primary source for the study was the CEBs for the years 1861, 1871, 1881 and 1891 giving a total sample of 3 800 census families or some 17 500 individuals. Industrial and occupational structures were examined, with particular regard to the differing role of the sexes in the employed sector of each community. The changing social structure, through time and in both locations was also investigated.

Docherty noted^{2.32} that there was, to some degree, a transient population, and terms such as lodger, boarder and visitor were not precisely defined for enumerators and this led to inconsistencies in the methods employed in

2.30 *ibid*, 17

2.31 Docherty, C 1988. *Migration, ethnicity, occupation and residence in contrasting West of Scotland settlements: the case of the Vale of Leven and Dumbarton, 1861-1891*. Thesis (PhD) University of Glasgow

2.32 *ibid*, 60-62

completing their books. There were also peculiarly Scottish problems with the definition of 'household' due to the predominance of the tenement in the urban areas. The terms lodger and boarder were often incorrectly used. Strictly speaking the lodger inhabits a room or set of rooms by and large looking after himself, whereas the boarder will live in the house and share a table with the head of the household and his family. Visitors should be treated separately from lodgers although '... at the margin the two categories obviously overlap'. Docherty states that computerising the census records and manipulating the databases were central to the completion of the study. However, no information is given on the method of data capture, the software or the database other than the implication that the data were processed on a mainframe computer.

Philip N Jones^{2.33} has conducted a study of marriage and immigration and the relationship with the linguistic characteristics and social life of two communities in the Ogmore Fawr and Garw valleys. The 1891 census returns were used to provide data on 1 611 married couples living in the parishes of Llangeinor and Llandyfodwg. Couples were selected on the basis of both being present on census night and with concomitantly adequate information on language ability and place of birth^{2.34}.

Data were analysed in order to quantify marriages between linguistically similar partners (generally Welsh only, at thirty-four per cent of the total), and marriages between linguistically different partners. Data were also extracted

2.33 Jones, P N, 2003. Marriage as an index of acculturation in the South Wales coalfield before 1914. *Llafur*, 8 (4), 19-30

2.34 *ibid*, 21

from Church marriage registers but it was emphasized that these were far less reliable than CEBs given the significant numbers in the population that were nonconformist. The study also considered female marriage rates in an area where there was a high proportion of young male migrants earning relatively high wages. Other published work by this author, reporting on a study of the same communities in 1881 and paying particular attention to the role played by inward migrations, is discussed in chapter 4.

There have been a number of published studies that have attempted a structured analysis of Cardiganshire census returns. These studies have had limitations; they may have considered only certain relatively restricted geographical areas, or may have focused on returns produced before 1891, or may have been confined to certain defined fields within the published records. This present study, as explained earlier, attempts an analysis based on a wider geographical coverage limited to 1891 and includes a larger range of parameters. Most existing studies have used a qualitative rather than a strictly quantitative approach^{2.35, 2.36}. In other words, selected examples have been used, on an almost anecdotal level, to describe the main features of communities and the changes and developments that impacted upon them. Briefly, previous studies relate to the census years 1871 and earlier and have been relatively limited and selective. They have not been as geographically extensive or socially inclusive as the present study. Even those studies that have been based on the 1891 Census returns are based on small (and

2.35 Bowen, E G, 1979. *A History of Llanbadarn Fawr*. Llandysul: Gomer Press, Appendix G. ISBN 0850885027

2.36 Benjamin, E A, 1986. *Footprints on the Sands of Time: Aberystwyth 1800 – 1880*. Carmarthen: Dyfed County Council. ISBN 0860750159

statistically unrepresentative?) populations^{2.37}. The methodology used for the present study sets it apart from such previous exercises. An essential difference in methodology between earlier studies involving mainframe computer applications and the present research effort is the availability, at zero marginal cost, of appropriate personal computer hardware and database software.

An early study involving the use of census returns to construct a socio-economic model of a predominantly agricultural community in Ceredigion was undertaken by Spencer Thomas^{2.38}. He used the returns for Llansanffraid for 1841 and 1851. From the occupations cited he was able to describe the pattern of farming and then calculate the numbers of farmers, labourers, and male and female servants. These earlier returns were used to study and interpret age and gender distributions and form a view of possible outward movement of, usually, younger people. Thomas also suggested that the returns can be used to determine family size and age of marriage, though there may have been distortions due to migration and mortality.

The census returns for a number of districts and parishes in and around Aberystwyth were, over time, name indexed by the late Mr E Alwyn Benjamin (1915–1994) of Penarth; the so-called Benjamin Indexes. This was almost certainly a labour-of-love principally designed to aid genealogists and family

2.37 Smith, R, 1999. Aberystwyth (Cardiganshire). *In*: Parry, G and Williams, M A, eds. *The Welsh Language and the 1891 Census*. Cardiff: University of Wales Press, chapter 12. ISBN 0708315364; Cooper, K, 2009. Trefeurig, 1851-1891: A case study of a lead mining township. *Ceredigion*, 16, (1), 81-116

2.38 Thomas S, 1963. The enumerators' returns as a source for a period picture of the Parish of Llansanffraid. *Ceredigion*, 4, (4) 408-421

historians in researching the published census returns for 1841 to 1871. These typescript name indexes are available as bound volumes in Archifdy Ceredigion, the National Library of Wales and the local studies section of Aberystwyth Public Library. These manually produced personal name indexes cover the period 1841-1871 and include the parishes of Llanbadarn Fawr, Llanfihangel-y-Creuddyn, Llanfihangel Geneu'r-glyn, Llangynfelyn, (part), Llanbadarn-y-Creuddyn, Llanychaearn, Llanafan and Aberystwyth Town. The 1891 census for Aberystwyth only has been transcribed and name indexed by Mr William Howells, the Ceredigion County Librarian, and is available as a single bound volume. These indexes are designed as elementary search tools for local and family historians and pre-date the introduction of commercial online census search facilities.

Using the data provided by these indexes and applying his detailed knowledge of the locality and its society, Benjamin published^{2.39} a semi-quantitative analysis of a whole range of indicators for Aberystwyth. His report is, as far as is known, the first attempt at a structured interpretation of census records for Aberystwyth. Although the study presented measures derived from four census returns from 1841 to 1871 it is really only the last of these that is deserving of closer examination. That is not a negative comment on the work of Mr Benjamin but rather a reflection on the coverage and quality of the earlier census returns. Indeed, Benjamin has provided some valuable information that is further developed and extended in the present study.

Benjamin tabulated main classes of occupation in Aberystwyth for 1841 to

2.39 Benjamin, E A, 1986. *Footprints on the Sands of Time: Aberystwyth 1800 – 1880*. Carmarthen: Dyfed County Council. ISBN 0860750159

1871^{2.40}. His classification system is thought to have been created solely in the context of his study and without reference to other recognized protocols. A comparison of naming patterns for both Christian names and surnames was produced. It is thought that this is the only formal analysis of Christian names in Victorian Cardiganshire to have been published and which sheds light on the popularity of names in Victorian times. That study is extended and formalized in the present work – see chapter 6, below. Benjamin's study was based on a population of less than 7 000.

Throughout the study Benjamin uses simple but robust numerical measures to explain and describe the social and commercial life of the town in 1871. In support of these detailed descriptions he cites many named subjects ranging from 26 ministers of religion to 12 Post Office workers to 11 undergraduates. Of course, at that time, these would have been students attending colleges outside Aberystwyth.

It has to be said that Benjamin's publications have provided much of the inspiration and ideas for the present study where some of his themes are developed, albeit on a greatly extended and formalised scale.

Benjamin also used his extensive experience as transcriber and indexer of the census returns for 1851 to 1871 for Aberystwyth and some rural parishes in north Ceredigion to conduct a semi-quantitative survey of reported disabilities^{2.41}. The census schedules contained a column headed 'Whether 1 Deaf-and-Dumb 2 Blind 3 Imbecile or Idiot 4 Lunatic'. By 1891 the third and

2.40 *ibid*, 28

2.41 Benjamin, E A, 1985. Human afflictions: A study of the North Ceredigion census returns, 1851-71. *Ceredigion*, 10, 155-160

fourth categories had been combined. Benjamin^{2.42} looked at the incidence of blindness in some detail and attempted to relate the condition to environmental factors, especially the bad working conditions in the lead mines where the miners toiled by candlelight. The incidence of deafness was also examined. It was not possible to relate that condition, nor the incidence of chronic mental illness, to exposure to lead mining. It was concluded that no clear pattern could be seen and that care is required in using the information from the census returns. This topic is addressed, briefly, in chapter 5.

Benjamin has also conducted studies, using information derived from census returns, on Cwmrheidol, 1861 to 1871, on Melindwr, 1841 to 1871 and on Parcel Canol, 1841 to 1881^{2.43}. These qualitative studies provide simple but informative summaries of the nature of the populations of the districts in terms of gender, age structure and principal occupations. There are descriptions of the lives and work of lead miners and their families and of farmers and agricultural workers. In the lead-mining communities the numbers of subjects originally from Cornwall and Devon are detailed.

Bowen^{2.44} contains, in the form of an appendix, an extract from the 1851 CEBs which lists, alphabetically by family surname, residents of the village (not the parish) of Llanbadarn Fawr. In his chapter on occupations the

2.42 *ibid*, 156

2.43 Benjamin, E A, 1981, The Enumeration District of Cwmrheidol, 1861-71: A Comparative Study. *Ceredigion*, 9, (2), 128-134; Benjamin, E A, 1983, Melindwr, Cardiganshire: A Study of the Census, 1841-71. *Ceredigion*, 9, (4), 322-335; Benjamin, E A, Parcel Canol, Cardiganshire: A Study of the Censuses, 1841-81. *Ceredigion*, 10, (4), 383-391

2.44 Bowen, E G, 1979. *A History of Llanbadarn Fawr*. Llandysul: Gomer Press, Appendix G. ISBN 0850885027

following observation is made, but here referring to the 1871 Census^{2.45}:

‘One of these clerks, Harry Lloyd, was the son of Henry James Lloyd, a retired army officer. His elder son, Richard, was Superintendent of the County Police. Hence, in one family, therefore, we have three professions represented.’

Whilst it may be tempting to quote interesting personal details for named individuals, and many observers do so when attempting to interpret census data, it is, perhaps, dangerous to use very small numbers, and then, in isolation, use them to draw broad conclusions. To move from the specific to the general on the basis of limited and possibly misleading census information cannot really be justified. Henry James Lloyd had, indeed, been an army officer (as correctly shown on the 1871 census return) but that was long before he appeared in Cardiganshire where his profession was that of Superintendent of Police; his son Richard following in his footsteps. Mr H J Lloyd was the first Superintendent of Police, following the creation of the Cardiganshire Police Force, from 1844 until his retirement in December 1870, at which time he was granted a pension of £100 per annum^{2.46}.

This popular tendency to use selected examples to support a broader hypothesis only serves to further validate the basis of the present study where the analysis is based on a 100 per cent sample across a significant, contiguous, geographical area. There *is* safety in numbers. In statistical terms the sample presented in Bowen is too small to permit of meaningful analysis, but that, to be fair, was never his intention. The extracts were presented in

2.45 *ibid*, 133

2.46 Evans, H, 1897. *History of the Cardiganshire Police Force*. Aberystwyth: J and J Gibson, 112 (NLW ref XHV7571.C3); This 1897 *History* also records (page 90) that at the January 1851 Quarter Sessions, ‘Mr Superintendent Lloyd was appointed Inspector of Weights and Measures for the whole County’.

order to support some qualitative discussion of family characteristics and occupations covered within the main body of the book. It must also be true that these selected, personal, references add colour and insight into some aspects of a society that is now far beyond living memory.

2.5 Explanation of construction of alpha-numeric database including selection and definition of fields

To test the proposition that manuscript census records might be amenable to sorting and analysis in a simple computer database a pilot project was created involving some 2 200 residents of Aberystwyth and Llanbadarn Fawr enumerated in the 1891 Census. Some writers have suggested that the use of a pilot model is essential prior to mounting any serious study^{2.47}. The manuscript (microfiche) images were read and typed, line-by-line, into a Microsoft Excel database and from that initial exercise some basic lessons were learned. It was clear that the technique had potential for sorting and counting records in order to provide quantitative and robust values for a range of measures across a spread of parameters. The main disadvantage of this approach is that the effort required to capture the raw data is very labour-intensive and time-consuming. However, given that the source information exists only in the form of handwritten lines of entries in tabular form it is not possible to capture the information in the records other than by reading and

2.47 Greenstein, D I, 1994. *A Historian's Guide to Computing*. Oxford: Oxford University Press. ISBN 0198235216; Spaeth, D, 2003. Research and Representation: The M.Phil in History and Computing. *Computers and the Humanities*, 37, 119–127.

typing the information, line-by-line. The use, for example, of scanners and OCR software is not an option. Some of the pages on the 'fiche images are difficult to read and for the main project it was necessary to consider and use other, alternative, formats capable of providing improved legibility. A range of sources was used, involving microfilm, microfiche, CD and online digitised images. Although the data capture phase of the project had to be done manually it also allowed the level of intellectual interpretation and enhancement of the raw data alluded to previously. The time and effort required here to read, decipher and type out the manuscript returns contained in the CEBs was considerable. Quite often, in any quantitative study, the amount of labour required in capturing raw data can be limited through the use of sampling. Where sampling is applied a relatively small number of individuals may be selected out of a larger population but chosen in such a way as to ensure that the sub-set so created is still statistically representative of the whole^{2.48}. Sampling has been used in some other studies where large populations have been examined. Where smaller numbers have been involved, typically communities of 2 000 subjects or less, then a 100 per cent sample may have been used. Although the present study was seeking to examine a population of over 24 000 it was decided not to use sampling but to capture *all* the records for *all* the subjects.

The justification for using a 100 per cent sample rather than a lower value, say a five or ten per cent sample, was to avoid any problems with bias. It was

2.48 Schofield, R S, 1972. Sampling in historical research. *In*: Wrigley, E A, ed. *Nineteenth-century society. Essays in the use of quantitative methods for the study of social data*. Cambridge: Cambridge University Press, chapter 5, pp 146–190. ISBN 0521084121

thought that the amount of labour required to process all the records for nearly forty per cent of the population of Ceredigion in 1891 was worth the effort. By so doing there could be no question of statistical bias or the loss of credibility through the possible introduction of random, uncontrolled errors. Where a sample of less than 100 per cent is used any statistical results will be used to draw conclusions, by extrapolation, up to the larger, parent, population. From the pilot study it was felt that conclusions based on a small and variable population should not be used to infer characteristics for the entire population of the study area. The use of inferential statistics did not have to be justified or defended in this project. There are some acknowledged uncertainties around the accuracy of the source data so the aim here was to create a basis upon which sound conclusions might be drawn. It was felt that only a 100 per cent sample would provide for an acceptable degree of confidence throughout the process, It was the intention, from the outset, that this approach should set the present study apart from the work of other researchers. A sub-set used to create a sample of the total study population can be subject to a range of errors, including random sampling errors, bias in the selected sample, typing errors, and errors inherent in the original records. A 100 per cent sample will probably eliminate the first two errors. The second two errors may arise whether sampling is used, or not. In practice it is thought that most typographical errors have been detected and corrected by repeated sorting and scanning of the digitised records. If a data element has been wrongly typed or placed in the wrong column that will have been highlighted by using a simple sort. If, for example, an age value, say 67, is entered in the

'Condition as to Marriage' column where the entry can only be *M* or *S* or *Wid* or *Widr* then a sort executed on that column will immediately throw up the error. Clearly this was an iterative process with further errors being highlighted as the manipulation of the data progressed. In some cases the cause of the error was immediately obvious, in others it was necessary to refer back to the transcribed entry in the CEB.

2.6 Choice of database software

A Microsoft Excel spreadsheet was chosen as an appropriate platform for the creation of an alpha-numeric database. Alternatives such as *κλειω*, SPSS, Microsoft Access and relational database management systems were deemed to be overly complex for the present application. Whilst noting the use of these more advanced options there are researchers who have obtained quite satisfactory results through the use of Excel – see section 2.4 above. Excel has a number of practical and utilitarian advantages that made it a suitable vehicle for this project. It has many features that probably explain why it is the most widely used spreadsheet tool. It is a standard option on most PCs that have access to the ubiquitous Microsoft Office package and is well understood and widely used by computer users with differing levels of skills. Potential users of alternative systems such as Access or *κλειω* may require a level of specialised instruction and competence above that normally found in computer-literate but relatively unskilled users of Excel. If so required, datasets can be transferred from Excel to Access, and on to other

options. Finally, Excel incorporates useful and relevant graphing and statistical analysis options.

The census source data naturally present in a regular, tabular format in rows and columns that make them most suitable for manipulation by a flat file spreadsheet, such as Excel, with its matrix layout of rows and columns. The original census records can include both numeric values such as age, and textual values such as parish of birth. Excel is an ideal tool for manipulating both forms using a simple Sort command. It is possible to select and manipulate three columns of data, ie three variables, within a single Sort^{2.49}.

Having derived novel information through the use of the database Sort command the results for the present study are presented, as far as possible, in graphical rather than tabular form. For most readers scanning rows and columns of numbers does not reveal much in the way of patterns, trends and relationships between discrete values. The human eye and brain is better at seeing patterns when the data are presented as simple pictures in the form of diagrams or graphs. Figure 4, above, is an example of a simple, sorted bar chart where the message about the relatively poor pay of agricultural workers in Ceredigion is immediately obvious.

The whole emphasis should be on simplicity and avoidance of any temptation to read more into the data than can be justified:

... the past happened quite awhile ago and cannot be known to several decimal places....^{2.50}.

2.49 Alexander, M, 2006. *Microsoft Access Data Analysis*. Indianapolis: Wiley Publishing, 385-391. ISBN 076459978X

2.50 H Haskins, L and Jeffrey, K, 1990. *Understanding Quantitative History*. Cambridge: MIT Press, 7. ISBN 0262081903

Having said all that, the over-riding factor in the choice of Excel was the desire to make the datasets available as stand-alone tools to any interested user wishing to undertake further research or, more simply, as a ready-made machine-readable personal name or place index. If a potential user finds that the Excel format is too restrictive for their purposes then they have the option of importing the records into a more powerful database management system, such as Access, without having to re-type some or all of the entries^{2.51}.

2.7 Transcription of data

The conventional and accepted procedure for transcribing census records is that they should be copied 'as-read'. Woollard^{2.52} has described the regime that applied to the transcription and name indexing of the 27 million subjects in the 1881 census for England, Scotland and Wales. This was a major project using volunteer effort, jointly promoted by the UK Public Record Office (now TNA), Federation of Family History Societies and the Church of Jesus Christ of Latter-Day Saints (Mormons). This policy of zero or minimalist intervention has long been in place. For the present study that practice has not been followed. Instead an interventionist approach has been applied which is designed to enhance the quality of the original records and render them more suitable for computer processing. A further factor was a desire to distance, in some way, the transcribed records from the original returns, and

2.51 *ibid*, 16-19

2.52 Woollard, M, 1996. Case Study D Creating a Machine-Readable Version of the 1881 Census of England and Wales. *In*: Harvey, C and Press, J. *Databases in Historical Research*. Basingstoke: Macmillan Press, pp 98-101. ISBN 0333568443

from the work of other transcribers. This, together with other initiatives, has been done to add value and reduce or avoid issues over copyright.

In practical terms, it is suggested there is simply no point in transcribing as-read a record which reads:

'Margaret Davies – Son – Age 18 – Single – Dressmaker'

As the records were read and typed into Excel it became easier, through familiarity, to cope with the variations in the quality of the handwriting. After gaining experience through transcribing the lines of data it was possible to return to earlier records that, initially, had been difficult to decipher and then find they were easier to read so errors and ambiguities were further reduced.

2.7.1 Place-names and identification of addresses

Extensive use has been made of modern large scale maps (Ordnance Survey 4cm to 1km scale) in plotting the coverage of each 1891 enumeration district as a quality check on place-name spellings and location. A remarkably high proportion of addresses were found in the CEBs that corresponded exactly to twenty-first century properties. Although this checking process, which involved locating and highlighting individual properties or groups of properties as well as addresses in urban areas, was very time-consuming it was felt to be justified, as a quality-control measure, for several reasons. It is almost inconceivable that an enumerator will have covered every individual, occupied, property in his or her district. There must have been some isolated households that were omitted. That can never be known, of course. At the

same time there was no evidence to show that properties were omitted to any appreciable extent, either through oversight or indolence. Higgs^{2.53} recommends the use of a gazetteer to clarify the status of settlements supplemented by large-scale maps for the study of place names. Consistency in the spelling of place-names together with adoption of 'modern' forms of variable or partially Anglicised versions was achieved through reference to an authoritative gazetteer^{2.54} supplemented by Ordnance Survey mapping.

2.7.2 Identification of place of birth

Column 15 in the census return is headed 'Where Born'. Each respondent was required to provide these details in the form of county and town or parish^{2.55}. It may be appreciated that the information provided by respondents did not always meet this requirement. A lack of precision may have resulted from a poor knowledge of geography by both subject and by enumerator on the one hand, and a degree of over-familiarity on the other, leading to ambiguous entries. When an entry reads 'Llanbadarn' it is not known (in a Ceredigion context) if this refers to Llanbadarn Fawr, to Llanbadarn-y-Creuddyn, to Llanbadarn Odwyn, or to Llanbadarn Trefeglwys (Llanbadarn Fach). It has been necessary, therefore, to make some arbitrary but probably sensible assumptions in such cases. When transcribing the entries for

2.53 Higgs, E, 1991. *Making Sense of the Census*. London: HMSO, 102. ISBN 0114402191

2.54 Davies, E, ed, 1967. *Rhestr o Enwau Lleoedd - A Gazetteer of Welsh Place-names*. Cardiff: University of Wales Press. ISBN 0708310389

2.55 Higgs, E, 1991. *Making Sense of the Census*. London: HMSO, 71-74. ISBN 0114402191

Llanbadarn Fawr parish if an entry reading simply 'Llanbadarn' was encountered it was assumed that it referred to that parish. When examining the entries for Ysbyty Ystwyth it was assumed that 'Ysbyty' alone did not refer to Ysbyty Cynfyn.

Where the stated place of birth appeared to be, for example, a row of cottages or a farmstead then other means were used in order to try and locate the correct parish. This normally involved locating the same subject or a member of the same family in the census returns for 1881 and/or 1901.

Where a county was given but the parish of birth was omitted a similar approach was used. Again, this involved the investment of considerable time and effort but it is suggested that the resulting improvements in data quality were in keeping with the overall aim of adding value in comparison with previous studies and other research sources.

There are some properties on modern maps that do not appear in the 1891 census, even though they are likely to have existed then, but these are very rare and their omission is almost certainly because they were unoccupied at that time. Another unknown was the number of properties that had been abandoned by 1891 but, in any event, they are unlikely to be shown on an Ordnance Survey map published in 2005. Some properties that existed in 1891 have disappeared where the sites have subsequently been cleared and redeveloped, typically in urban Aberystwyth, or through infrastructure projects such as road-widening improvements or the Nant-y-Moch hydroelectric scheme.

2.7.3 Birthplace coding

Dr Colin R Chapman (the eminent British family historian) has devised a system of three-letter codes to denote countries and counties. These codes were initially constructed for the benefit of genealogists and then adopted by the British Standards Institution as the basis for British Standard 6879; they are known as Chapman Codes^{2.56}. The Chapman Code for Ceredigion is CGN, for Ynys Môn AGY, for Shropshire SAL, for West Riding of Yorkshire WRY, and so on. These codes do not apply below county level. The present study required a classification system that could code and sort at parish level. After making enquiries with a wide range of authorities it was found that there was no universal parish coding system used by the Welsh family history societies that was suitable for the present study. For example, the Ceredigion society uses LBF for Llanbadarn Fawr. This coding system does not incorporate a county identifier and is not used outside Ceredigion. The most comprehensive all-Wales county-parish coding system suitable for the present study was that which had long been used by the Gwynedd Family History Society but not adopted or recognised by any other body. A set of these schedules^{2.57} was kindly provided by Mr Gwyndaf Williams of Bethel, Caernarfon. The Gwynedd system uses CGN 24 for Llanbadarn Fawr. That system is, for example, capable of distinguishing between Henllan CGN 22 and Henllan DEN 15. The Gwynedd system did require further work to make

2.56 British Standards Institution, 1987. *British standard specification for codes for the representation of names of counties and similar areas*. London: BSI. ISBN 0580160947

2.57 Personal communication, Sep 2008.

it suitable for the present study by adding some missing parishes and by including some Ceredigion settlements and cross-referencing them to the appropriate parish. It will be appreciated that parish identities have evolved over time but every effort was made to create an authority list that reflected Welsh local government and ecclesiastical structures as they existed in 1891.

For example:

a code was added for Llangorwen – CGN 72 (ecclesiastical parish from 1842)
a cross-reference was created for Broncastellan – see Llangorwen CGN 72
a code was added for Ffynnongroyw – FLN 40 (ecclesiastical parish from 1883)
a cross-reference was added for Pwllheli – see Deneio CAE 19

The amended authority listing is appended to this dissertation at C.

2.7.4 Occupation

This study pays particular attention to the analysis and interpretation of reported occupations and professions; one aim being to develop and extend Benjamin's study of occupations for Aberystwyth town, 1841 to 1871^{2.58}. The most difficult part of any census-based study (in terms of an objective and structured analysis) is likely to be that concerned with the occupations of the subjects. The difficulties will arise at two levels. There will be the uncertainties encountered by the original collectors and recorders of the occupational data. Some of these uncertainties will arise from the local context. In Victorian Cardiganshire the term 'captain' would be clearly understood both by a mariner and a lead miner but denote quite different occupations. The second

2.58 Benjamin, E A, 1986. *Footprints on the Sands of Time: Aberystwyth 1800 – 1880*. Carmarthen: Dyfed County Council. ISBN 0860750159

level of difficulty will concern the classification, analysis and interpretation of occupations for the benefit of present-day historians.

As highlighted above, Benjamin^{2.59} attempted an analysis of occupations in Aberystwyth Town in 1871, tracking changes back to 1841. He used his own classification system based on an alphabetic arrangement of occupations by title, thus:

Agricultural and other labourers

Blacksmiths, farriers and shoers

Brewers, etc

Building workers, etc

Benjamin's classification has limitations; it was devised for a small urban population which may be considered a special case. There was no provision for lead miners, fishermen or those engaged in ship repairing. Sailmakers and ship-riggers were classified under 'Miscellaneous'. The largest single occupational class was 'Servants'. It is not clear if this included agricultural servants or if they were counted as Agricultural and other labourers. Benjamin also acknowledged that a chronological comparison was difficult due to missing parts for some census returns. He examined some classes of occupation in fine detail. From the 1871 census ten coal merchants are identified by name, age and address. Benjamin identifies five police officers and then lists six subjects by name, age, place of birth and address.

2.59 *ibid*, 28

A number of writers, when discussing the classification of Victorian occupations have called upon the pioneering work of Charles Booth^{2.60}. Charles Booth (1829-1912) was a member of a Liverpool family with interests in shipping; he was chairman of Alfred Booth and Company which operated between Liverpool and South America. He was also a social reformer and contemporary of, among others, Beatrice Webb (his cousin) and William Booth (no relation)^{2.61}. Charles Booth was author of a survey of life and labour in London, and produced maps of London poverty. When analysing census reports in order to study trades and occupations and associated topics such as wage levels and conditions of employment, he formed the view that existing systems for classifying occupations were inadequate. Booth produced a comprehensive and carefully argued coded classification system of his own^{2.62} that has, in effect, stood the test of time. The original Booth classification has been further developed by Armstrong^{2.63} to form what is sometimes referred to as the Booth-Armstrong classification^{2.64}. Booth grouped all occupations under eleven main categories. Armstrong has

- 2.60 These include: Jenkins, G H, 1999. The Historical Background to the 1891 Census. *In*: Parry, G and Williams, M A, eds. *The Welsh Language and the 1891 Census*. Cardiff: University of Wales Press, chapter 1, 21-30. ISBN 0708315364; Harvey, C and Press, J, 1996. *Databases in Historical Research*. Basingstoke: Macmillan Press, 227. ISBN 0333568443; Higgs, E, 1991. *Making Sense of the Census*. London: HMSO, 17. ISBN 0114402191; Allen, M A, 1999. *A Railway Revolution? A census-based analysis of the economic, social and topographical effects of the coming of the railway upon the city of Winchester c 1830-c 1890*. Thesis (PhD) University of Southampton; Mills, D R, 1999. Trouble with farms at the Census Office: an evaluation of farm statistics from the censuses of 1851-1881 in England and Wales. *Agricultural History Review*, 47, (1), 73
- 2.61 Hattersley, R, 1999. *Blood & Fire*. London: Little, Brown, chapter 18. ISBN 0316851612
- 2.62 Booth, C, 1886. Occupations of the people of the United Kingdom, 1801-1881. *Journal of the Statistical Society*, 314-435
- 2.63 Armstrong, W A, 1972. The use of information about occupation. *In*: Wrigley, E A, ed. *Nineteenth-century society. Essays in the use of quantitative methods for the study of social data*. Cambridge: Cambridge University Press, chapter 6, 228-283. ISBN 0521084121
- 2.64 Harvey, C and Press, J, 1996. *Databases in Historical Research*. Basingstoke: Macmillan Press, 227. ISBN 0333568443

confirmed that the occupational groupings devised by Booth are relevant to a study of the 1891 census^{2.65}. That classification has been adopted in the present study by retaining the original Booth-Armstrong structure with minor structural adjustments being applied to the occupational codes to facilitate sorting in Excel:

Booth classification:

Agricultural Sector	AG
Farming	AG.1
Farm bailiffs, stewards	
Farmers, graziers	

Present study:

Agricultural Sector	AG
01 Farming	AG01
Farm bailiffs, stewards	AG01.01
Farmers, graziers	AG01.02

Booth clearly did an excellent job, given his somewhat metrocentric terms of reference. The adapted structure is appended to this dissertation at F; its application is described in chapter 8

2.65 Armstrong, W A, 1972. The use of information about occupation. *In: Wrigley, E A, ed. Nineteenth-century society. Essays in the use of quantitative methods for the study of social data.* Cambridge: Cambridge University Press, chapter 6, Appendix D. ISBN 0521084121

2.8 Conclusions

This second chapter describes how nineteenth century censuses were administered before reviewing the work of other researchers who have undertaken analyses of census data. Some comparisons are drawn between these other studies and this present exercise with novel features highlighted. The strengths and weaknesses of census returns as a potential source of primary socio-economic data are considered. The construction of the alphanumeric database including selection and definition of fields is described and the methodology used for the transcription of the raw data explained.

Chapter 3 - Analysis of gender and age characteristics, including regional features and local variations

3.1 Introduction

This chapter reports on derived measurements of population and gender, of age distribution, and attempts to relate the results to the growth and development in some communities and to economic decline in others. An attempt is made to draw comparisons with changes in economic activities and movements of populations for other selected counties in Wales.

3.2 Population trends

Some previous studies have reported changes in population for the county of Cardiganshire and attempted to explain the economic and social influences leading to growth and subsequent decline. Gerald Morgan^{3.1} reports population numbers for Ceredigion from 1801 to 2001 set against a background of decline in agriculture, of lead mining, and in the birth rate, followed by an increase resulting from significant inward migration from England. Morgan, essentially, summarises the work of Aitchison and Carter^{3.2} who have provided a detailed account of social and demographic changes

3.1 Morgan, G, 2006. *Ceredigion: a Wealth of History*. Llandysul: Gomer Press, 321-322. ISBN 1843235013

3.2 Aitchison, J W and Carter, H, 1998. The Population of Cardiganshire. *In: Jenkins, G H and Jones, I G, eds. Cardiganshire County History Volume 3 Cardiganshire in Modern Times*. Cardiff: University of Wales Press, chapter 1. ISBN 0708314899

based on census summary reports.

Benbough-Jackson has noted that^{3.3}:

‘ . . . After two decades of steadier growth, and a peak of 73,441 in 1871, the population fell. There was a drop of 10.87 per cent between 1881-91, and by 1901 the census recorded 61,078 people living in the county. Migration led to demographic imbalances; Cardiganshire had an aging and lonely population. There was a significant imbalance of the sexes, in 1891 there were 1,274 women for every 1,000 men, the highest proportion of females to males in England and Wales. . . . ’

Russell Davies^{3.4} records that Cardiganshire’s population increased from 42 956 in 1801 to 59 879 in 1911. He then has to qualify that superficial and possibly misleading observation with the caveat:

‘ . . . Yet such figures conceal patterns of depopulation which seriously weakened Welsh-speaking communities. . . . ’

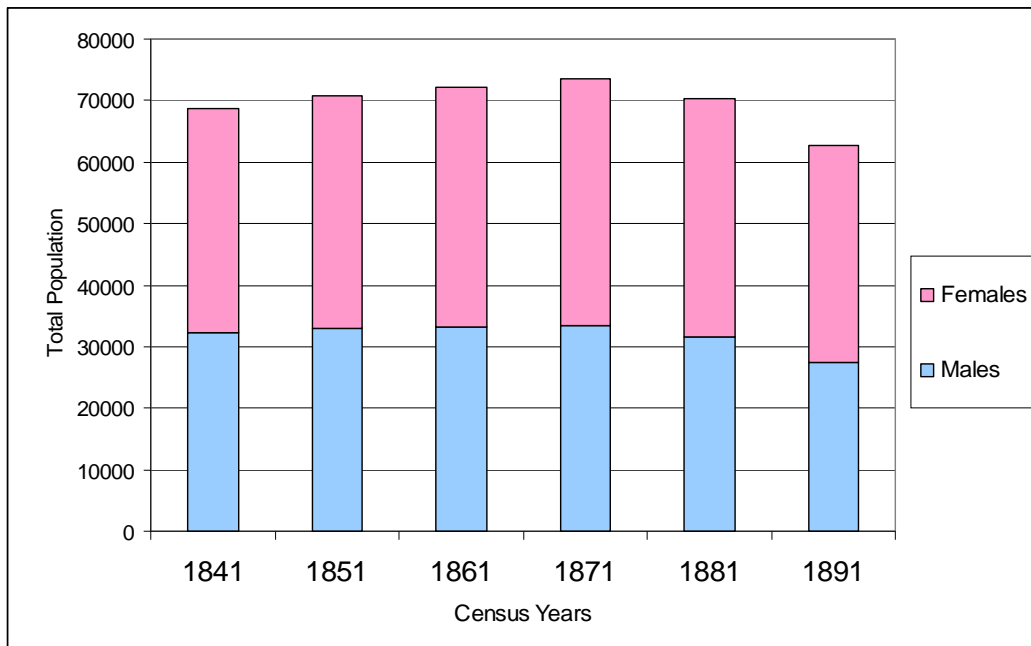


Figure 14 – Population of Ceredigion from census summary reports

3.3 Benbough-Jackson, M, 2007. *Cardiganshire A Concise History*. Cardiff: University of Wales Press, 114. ISBN 9780708321119

3.4 Davies, R, 1998. Language and Community in South-West Wales c. 1800-1914. In: Jenkins, G H, ed. *Language and Community in the Nineteenth Century*. Cardiff: University of Wales Press, 117. ISBN 0708314678

Kenneth Morgan^{3.5}, when commenting on the period 1881-91, notes:

‘ . . . In Cardiganshire, population also fell sharply, with the additional problem, as has been noted, of the collapse of the lead industry in the Ystwyth and Rheidol valleys and a shattering fall in the population there. . . ’

Aitchison and Carter^{3.6} have plotted the population of the county from 1801 to 1991 as a single curve. Figure 14, above, shows the population of Ceredigion from 1841 to 1891, for the ancient or geographical county (as opposed to the administrative authority – see section 1.3) and as a stacked bar chart defining the proportions of males and females within the total. The values presented in Figure 14 are taken from the *Digest of Welsh Historical Statistics 1700-1974. Table 1.1e*^{3.7}. It can be seen that the population of the county peaked around 1871 and that the subsequent decline in the male population, at minus eighteen per cent from 1871 to 1891, was greater than that of the female population, at minus twelve per cent, over the same period. Aitchison and Carter have identified four phases^{3.8} within the overall pattern of population change. There was a period of substantial growth from 1801 to 1841 followed by a more gradual increase to a peak in 1871. This peak was followed by a rapid decline up to 1891 and beyond until a low point was reached in 1951. Since that time the population level has recovered but it is probable that it

3.5 Morgan, K O, 1982, *Rebirth of a Nation Wales 1880-1980*. Oxford: University Press, 82. ISBN 0198217609

3.6 Aitchison, J W and Carter, H, 1998. The Population of Cardiganshire. In: Jenkins, G H and Jones, I G, eds. *Cardiganshire County History Volume 3 Cardiganshire in Modern Times*. Cardiff: University of Wales Press, 2. ISBN 0708314899

3.7 Llywodraeth Cynulliad Cymru/Welsh Assembly Government, 1998. *Digest of Welsh Historical Statistics 1700-1974. Table 1.1e Total population and intercensal changes by sex, Cardiganshire 1801-1971*. Available from: <http://wales.gov.uk/topics/statistics/publications/dwhs1700-1974/?lang=en> [Accessed 19 Feb 2010]

3.8 Aitchison, J W and Carter, H, 1998. The Population of Cardiganshire. In: Jenkins, G H and Jones, I G, eds. *Cardiganshire County History Volume 3 Cardiganshire in Modern Times*. Cardiff: University of Wales Press, 2. ISBN 0708314899

took until the end of the twentieth century to again reach the 1871 peak figure. The increase in population in the early nineteenth century is attributed to an expansion of agricultural output together with the increased lead mining activity. It is possible to speculate that growth in tourism may be having some effect on these recorded population figures. It should be remembered that the date of the census, upon which the values quoted by Aitchison and Carter are based, was generally set for the first Sunday in April. The 1841 census was held on 6 June and this relatively late date was thought to have produced idiosyncratic results. However, it is clear that a number of tourists, variously described as lodgers or boarders have been included in the present study. This is further discussed in chapter 8. In 1861 the census was held on Easter Day with the result that a number of subjects were not at their usual addresses.

Aitchison and Carter^{3.9} refer to a graph, plotting lead ore output over time, that appears in a book by W J Lewis entitled *Lead Mining in Wales*. They suggest

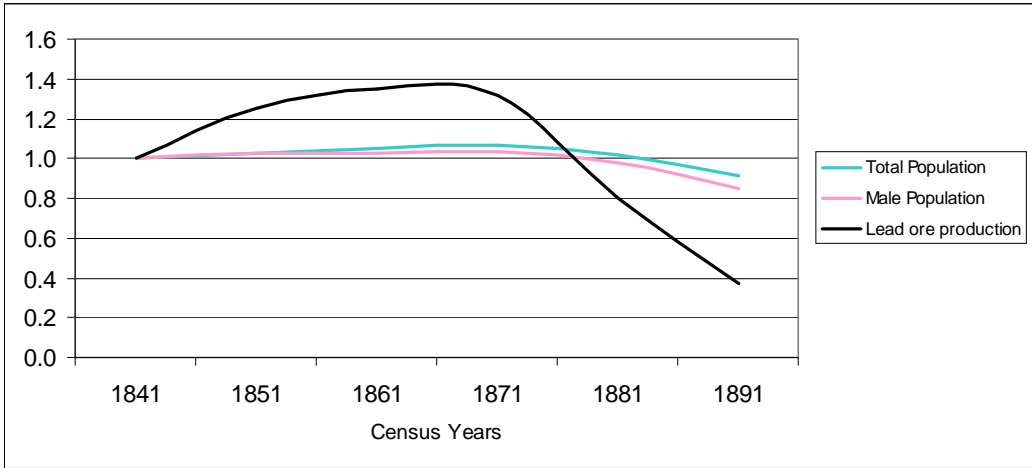


Figure 15 – Ceredigion population trends and lead ore output

3.9 *ibid*, 3

that ‘...the graph of the population of Cardiganshire mirrors that of lead ore production’. Figure 15, above, seeks to test this assertion; it uses the population values that underpin the graph in Figure 14, above, together with values for lead ore output. In order to provide a meaningful two-dimensional comparison absolute values are replaced by relative indices, rebased to unity at 1841.

The lead ore output figures used here are those cited in Burt *et al*^{3.10}. Once lead mining had started to decline it was natural that men should move away to seek work in the iron, steel and coal mining areas of south Wales. Aitchison and Carter^{3.11} point out that Cardiganshire people also had connections with London where there were opportunities to set up businesses, such as small dairies – the well-known ‘Cardi cowkeepers’.

Benbough-Jackson goes into a little more detail^{3.12}:

‘...For many, prospects in south-east Wales, or with the milk trade in London, were better than those available in the county – in 1891, 6,000 men in the Rhondda valleys were from Cardiganshire, and unlike earlier migrants many settled there...’

The statistical tables that appear in the published census summary reports provide a rather more precise quantification of the position. For those subjects enumerated in London in 1891, 1 570 males and 1 729 females

3.10 Burt, R, Waite, P and Burnley, P, 1985. *The mines of Cardiganshire: metalliferous and associated minerals 1845-1913*. Exeter: Department of Economic History, University of Exeter in association with the Northern Mine Research Society. ISBN 0950762458; As a convenience, the ore output figure used for 1841 is actually that reported for 1845.

3.11 Aitchison, J W and Carter, H, 1998. The Population of Cardiganshire. *In*: Jenkins, G H and Jones, I G, eds. *Cardiganshire County History Volume 3 Cardiganshire in Modern Times*. Cardiff: University of Wales Press, 3. ISBN 0708314899

6.12 Benbough-Jackson, M, 2007. *Cardiganshire A Concise History*. Cardiff: University of Wales Press, 115. ISBN 9780708321119

gave their place of birth as Cardiganshire^{3.13}. There is an implication here, perhaps, that some females were also able to find employment in London as domestic servants. However, in Glamorganshire in 1891, 8 594 males and 6 143 females reported that they were born in Cardiganshire. This is a very large figure, representing some twenty-four per cent of the population of their parent county at that time.

Figure 16, below, shows population trends for the administrative (not geographic) counties of Ceredigion and Glamorgan with another

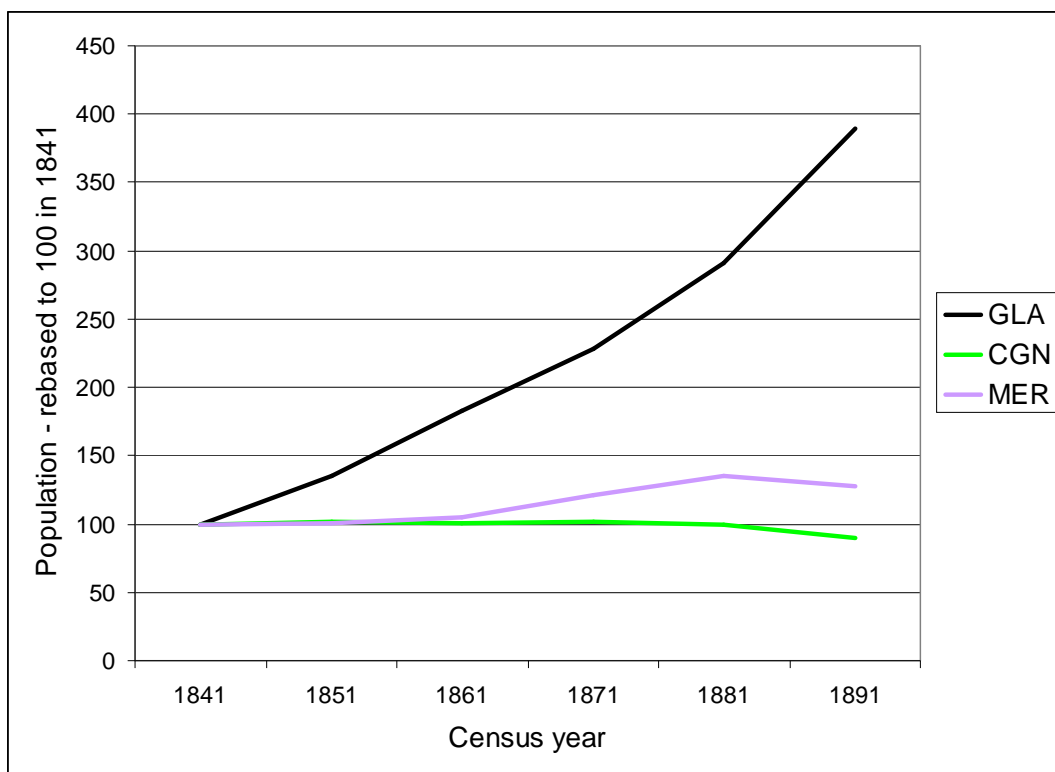


Figure 16 – Population trends, 1841-1891, Glamorganshire, Ceredigion and Meirionnydd^{3.14}

3.13 Registrar-General, 1893. *Census of England and Wales 1891. Condition as to Marriage, Occupations, Birth-place and Infirmities*. London: HMSO, Volume 3, Table 9

3.14 Jones, D, 1998. *Statistical evidence relating to the Welsh language 1801-1911. Tystiolaeth Ystadegol yn ymwneud â'r iaith Gymraeg 1801-1911*. Cardiff: University of Wales Press, 17-18, 20. ISBN 0708314600

predominantly rural county, Meirionnydd. The raw values have been rebased to 100 in order to permit of a more meaningful comparison.

The population of Glamorgan increased almost four-fold as the demand for labour in the collieries and iron and steelworks created better-paid job opportunities. The population trend for the registration county of Ceredigion remained flat or in decline, lagging, even, behind Meirionnydd.

This present chapter now goes on to consider population characteristics in 1891 as defined by age profile and gender ratios, here derived, of course, from the original enumerators' returns and not from the secondary official census summary reports.

3.3 Population age profile

Aitchison and Carter^{3.15} provide population 'pyramids' for a number of census years, including 1891, in which males and females are graphed according to age bands. The six age bands used in these pyramids are 0-14, 15-29, 30-44, 45-49, 60-74 and over 75 and the horizontal magnitude of each band correlates with population, measured in thousands. However, when examining gender ratios, Aitchison and Carter^{3.16} refer to bands with age ranges 20-24, 25-29, 30-34, and 35-39, perhaps suggesting that the bands in their population pyramids are too coarse to permit of meaningful analysis? In this present chapter the numbers of subjects have been calculated and

3.15 Aitchison, J W and Carter, H, 1998. The Population of Cardiganshire. *In*: Jenkins, G H and Jones, I G, eds. *Cardiganshire County History Volume 3 Cardiganshire in Modern Times*. Cardiff: University of Wales Press, 5. ISBN 0708314899

3.16 *ibid*, 4

grouped according to eight age bands:

- 0-5 years
- 6-14 years
- 15-24 years
- 25-34 years
- 35-44 years
- 45-54 years
- 55-64 years
- 65+ years

Figure 17, below, shows population distribution by age band and by gender

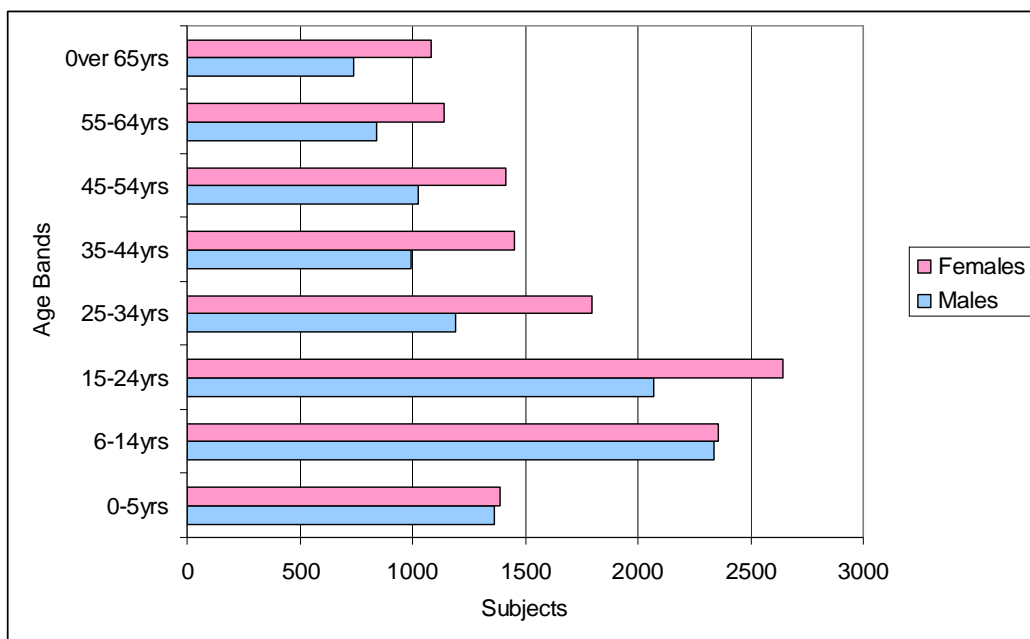


Figure 17 – Study area age profile

for all subjects within the study area at April 1891. It shows that up to the age of fifteen years the numbers of males and females are roughly in balance. Thereafter there are relatively fewer males through adulthood and into old age. Aitchison and Carter, in their age pyramid, have a single band, defined as 0-14 years and this has the effect of giving the pyramid a broad base indicating that the largest number and proportion of subjects lie within that age band. In order to explore the numbers of young people of differing ages a

further graph was produced. Figure 18, below, shows the cumulative number of males and females in the study area for each year of age up to fourteen years and is presented as a stacked columnar chart. This shows that the apparent population growth of juveniles in the study area was both even and linear; possibly implying that there were no major perturbations due to significant influxes of young people, or losses through epidemics of childhood

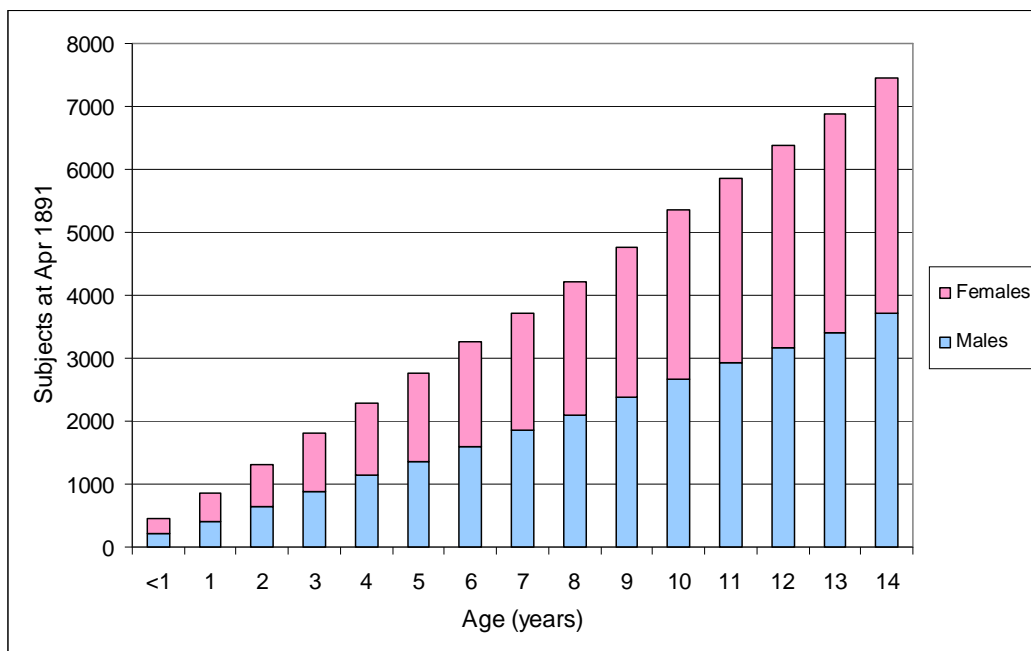


Figure 18 – Cumulative totals of juveniles, aged 0 to 14 years, by gender

diseases and significant outward migrations. Aitchison and Carter refer to a ‘high death rate among the young’^{3.17}. However, it is probable that a number of variables were at play here and their effects may well be masked within the generalised presentation of these data.

Figure 19, below, shows the populations by age band and gender for the registration (not geographic) counties of Ceredigion, industrialised Glamorgan

3.17 *ibid*, 6

and rural Meirionnydd for 1881. The proportion of juveniles below fifteen years of age is highest for Glamorgan females and Ceredigion males. The proportions of fifteen to twenty-nine year olds for both genders is highest in Glamorgan and lowest in Ceredigion. The proportions of middle-aged males and females is similar in Glamorgan and Meirionnydd but the proportion of elderly males and females is markedly higher in Ceredigion than in

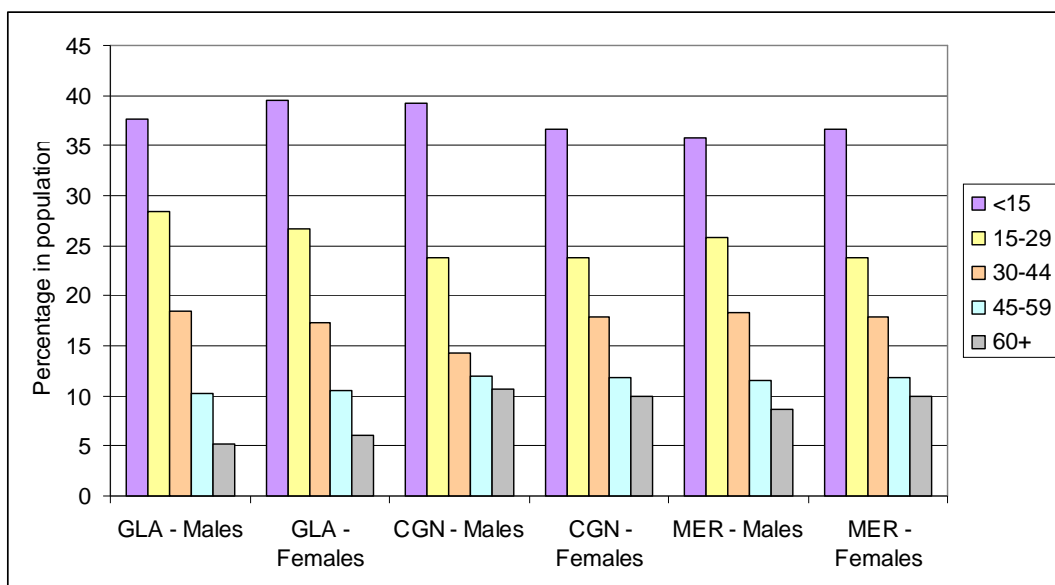


Figure 19 – Population age bands, as percentage, for males and females, Glamorganshire, Ceredigion and Meirionnydd for 1881^{3.18}

Glamorgan. These comparisons, although superficial and generalized and based on census data ten years earlier than the present study, confirm the view that Glamorgan was characterized by a younger and more dynamic population whereas Ceredigion had more older people due to the younger age groups leaving the county. Of course there could be other factors involved here; the picture may be affected by differences in life expectancy of

3.18 Jones, D, 1998. *Statistical evidence relating to the Welsh language 1801-1911. Tystiolaeth Ystadegol yn ymwneud â'r iaith Gymraeg 1801-1911.* Cardiff: University of Wales Press, 91-93. ISBN 0708314600

workers in different industries but the statistical significance of such influences is not known.

Figure 18, above, looked at the detailed age distribution for children and young people and demonstrated that the age progression was smoothly linear and that the genders were in balance. Figure 20, below, takes the comparison forward from age fifteen through to age twenty-four. It can be seen that the number of males in the study area population starts to diverge from the number of females around the age of seventeen, with ninety fewer

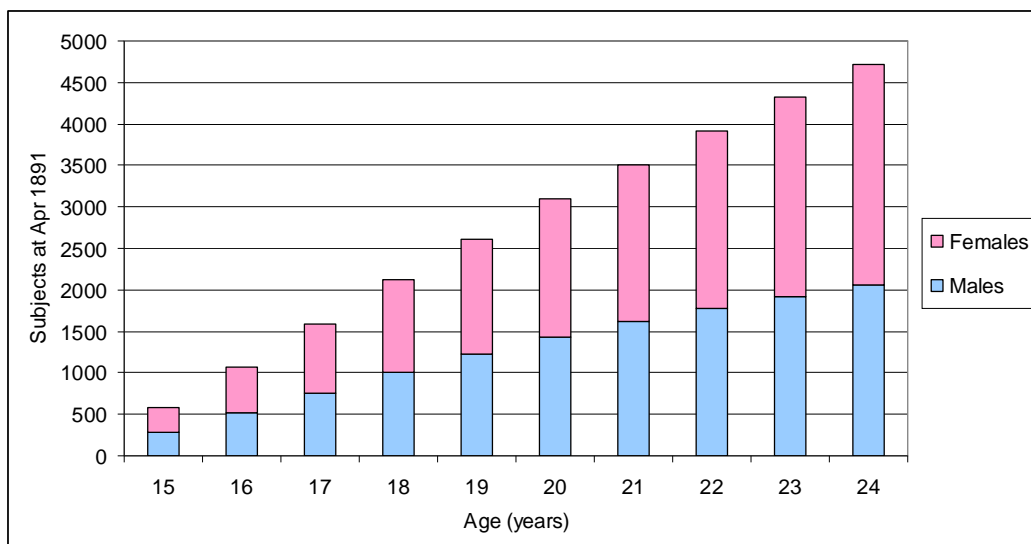


Figure 20 – Cumulative totals of young people, aged 15 to 24 years, by gender males at that stage. The gap gradually widens so that at the age of twenty-four there are over 500 more females than males. It is suggested that this graph demonstrates the age at which out-migration of young men commenced and so provides a more complete picture of the social structure of young people in northern Ceredigion in 1891 than that provided by Aitchison and Carter. The results here show that the proportion of young men in the study population started to diminish, relative to the numbers of young

women, as they reached working age. This almost certainly is confirmation that, around 1891, there was an established pattern of out-migration of young men from north Ceredigion prompted by a lack of employment opportunities.

3.3.1 Age profile in Llanrhystud registration sub-district

This sub-district (defined in Figure 8, above) had an aggregate population of some 2 700. Figure 21, below, shows the banded age structure of the population for males and females in the form of a stacked bar chart. This clearly shows that up to the age of fourteen there were, rather unusually, more males than females but ten years later the situation was dramatically reversed. The number of females outnumbered males in each of the remaining age bands. Evidence for this demographic imbalance, a persistent

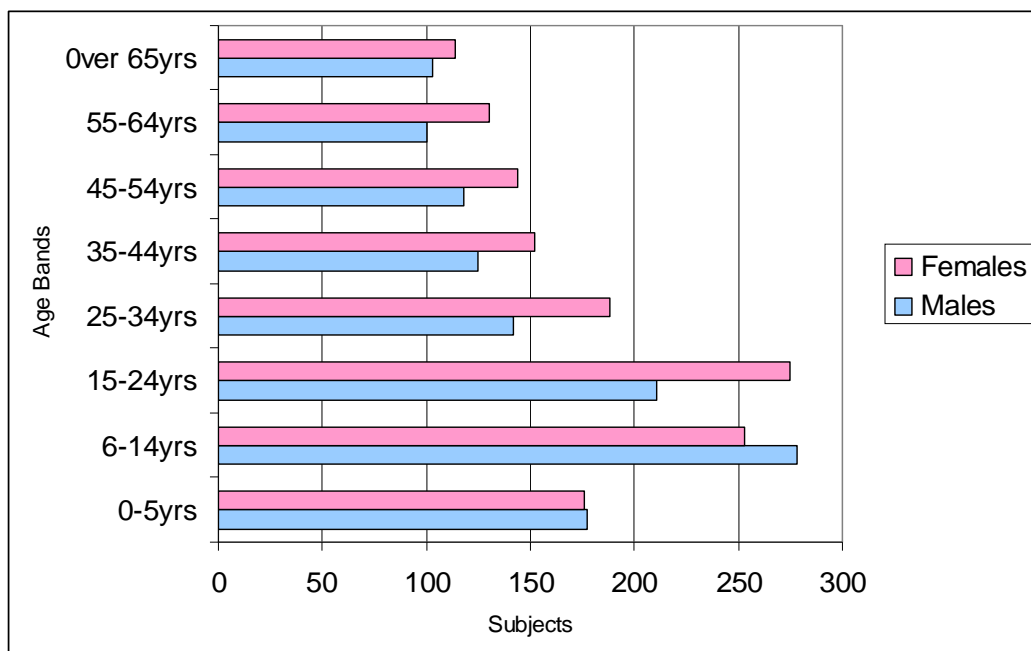


Figure 21 – Llanrhystud registration sub-district age profile, by gender

theme stamped on the social structure of Ceredigion throughout the latter part of the nineteenth century is presented elsewhere in the present study. So what happened to the men from this predominantly agricultural area? Did they leave the land after the agricultural depression prompted a change in land-use after 1880 from arable to livestock rearing? Did they become mariners, or colliers in the south Wales pits or, venturing even further, in the anthracite mines of Scranton and Wilkes-Barre^{3.19}? The newly-published study by Cooper is thought to address some of these questions but it has appeared too late to be properly taken into account in the present study.

3.3.2 Age profile in Aberystwyth Urban registration sub-district

This sub-district included the parishes of Holy Trinity and St Michael. The area had an aggregate population of some 6 700. Figure 22, below, shows that there were more females than males from the ages at which women could enter into employment. The gender imbalance is most marked for women in their twenties and thirties, possibly reflecting greater employment opportunities for unmarried women in the developing services sector. In the town, and in some adjoining parishes, there were middle-class households employing domestic servants in addition to the work opportunities arising in hotels and guest-houses.

3.19 Jones W D, 1998. The Welsh Language and Welsh Identity in a Pennsylvanian Community. *In*: Jenkins G H, ed. *Language and Community in the Nineteenth Century*. Cardiff: University of Wales Press, 261-264. ISBN 0708314678; Cooper K J, 2011. *Exodus from Cardiganshire: Rural-urban migration in Victorian Britain*. Cardiff: University of Wales Press. ISBN 9780708323991

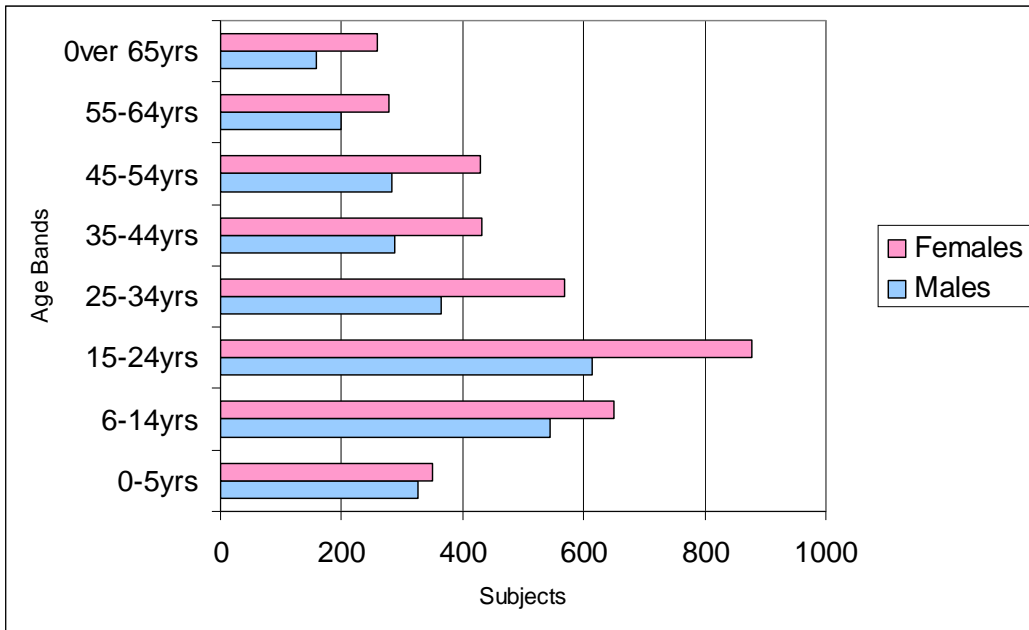


Figure 22 – Aberystwyth Urban registration sub-district age profile, by gender

3.3.3 Age profile in Aberystwyth Rural registration sub-district

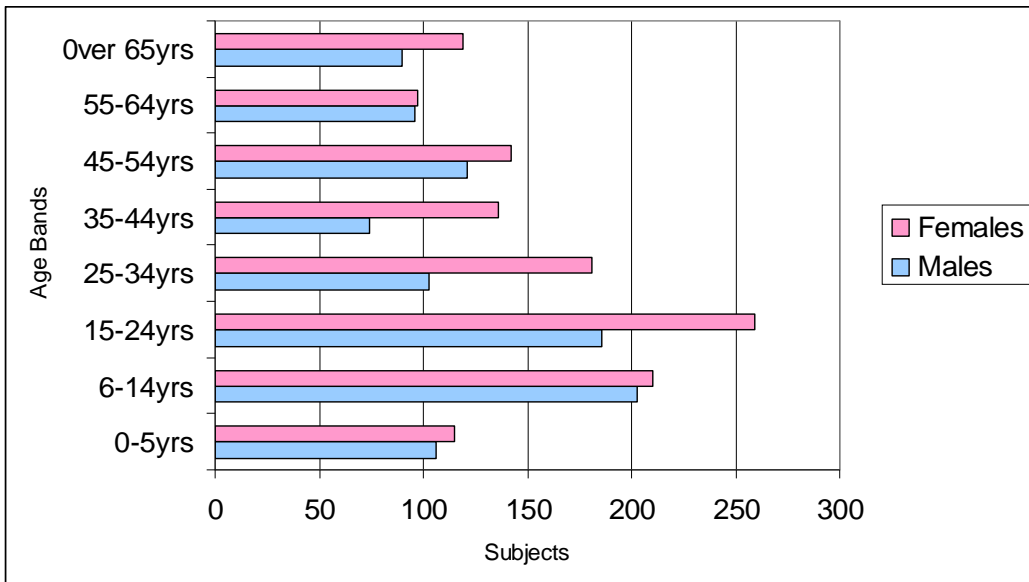


Figure 23 – Aberystwyth Rural registration sub-district age profile, by gender

This sub-district (defined in Figure 9, above) had an aggregate population of some 2 700. Figure 23, above, shows a marked loss of young males, especially in the twenties and thirties age groups. This pattern is repeated in all the rural sub-districts within the study area.

3.3.4 Age profile in Genau'r Glyn sub-district

This sub-district (defined in Figure 11, above) had an aggregate population of some 3 600. Again, the loss of males in their twenties and thirties is obvious from Figure 24, below. However, there appears to be some stabilization in the numbers of men in the age groups over twenty-five years which suggests that those who were intent on leaving the locality had done so by then.

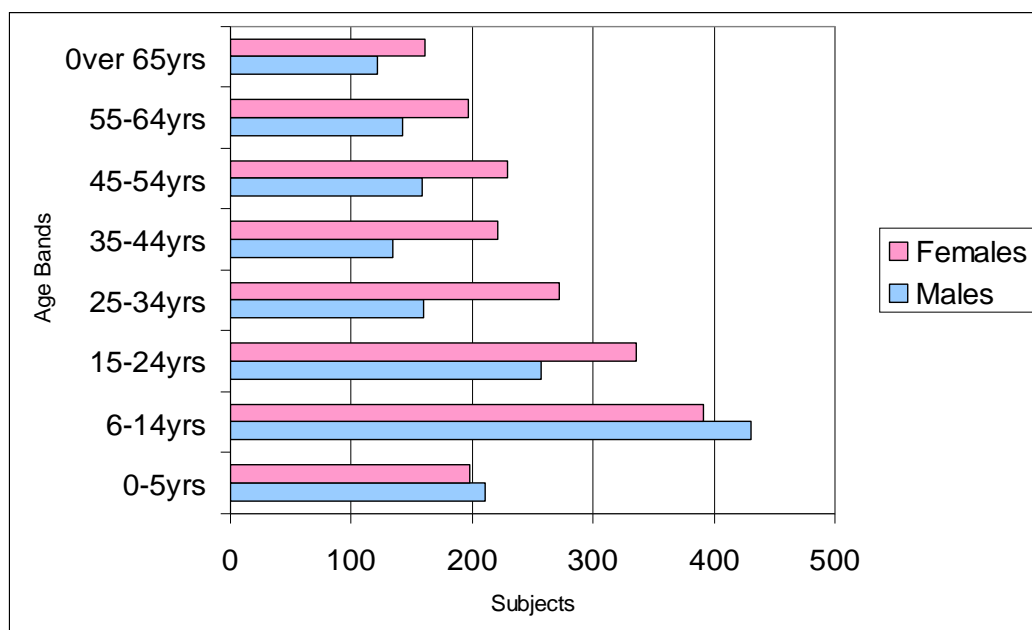


Figure 24 – Genau'r Glyn registration sub-district age profile, by gender

3.3.5 Age profile in Rheidol sub-district

This sub-district (defined in Figure 12, above) had an aggregate population of some 5 300. The population age structure represented in Figure 25, below, again shows a loss of males from their thirties and beyond. Cooper has produced age profiles for the township of Trefeurig (in the rural part of the parish of Llanbadarn Fawr) for 1851, 1871 and 1891^{3.20}. Those profiles relate to a population of some 800, and the results are very similar to those of the present study, given the smaller size of her sample population. Cooper suggests that the numerical imbalance between young men and women must have had an impact on female marriage prospects and, consequentially, on birth rate.

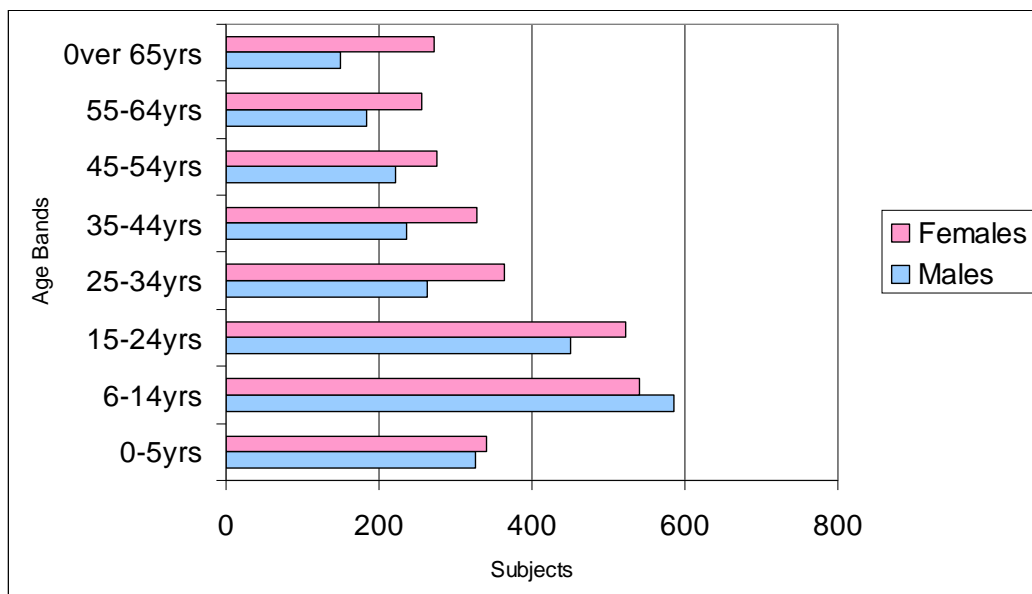


Figure 25 – Rheidol registration sub-district age profile, by gender

3.20 Cooper, K, 2009. Trefeurig, 1851-1891: A case study of a lead mining township. *Ceredigion* 16 (1) 81-116

3.4 Gender ratios, marriage and birth rates

Aitchison and Carter^{3.21} discussed the use of gender ratios, that is, the proportion of males to females expressed as percentage, in the context of marriage and birth rates. They have asserted that, in the first census of 1801 (being, at that time, but a crude statistical head-count), the male:female ratio was 90.5%, rising to 93.3% in 1821. They then maintain that the ratio showed a steady decline, falling to 78.5% in 1891. They derived the male:female ratios for those age bands that they perceived to be most significant for marriage and the subsequent birth of offspring, the ranges selected and the corresponding male:female ratios being:

20-24 yrs	- 73.4%;
25-29 yrs	- 63.9%;
30-34 yrs	- 67.5%;
35-39 yrs	- 68.4%.

Aitchison and Carter suggest that these indicators reflect substantial outward migration of young males seeking work, possibly into the south Wales coalfield. They cite^{3.22} a comment by Kenneth Morgan, who observed:

‘ . . . On all sides, therefore, Cardiganshire manifested the grim symbols of a depressed area - the loss of young males ... and a truly staggering surplus of unmarried females. The proportion of females to males was the highest for England and Wales recorded in six successive censuses. . . . ’

A number of commentators have identified the imbalance between the numbers of males and females, especially in the age groups where young

3.21 Aitchison, J W and Carter, H, 1998. The Population of Cardiganshire. *In*: Jenkins, G H and Jones, I G, eds. *Cardiganshire County History Volume 3 Cardiganshire in Modern Times*. Cardiff: University of Wales Press, 4. ISBN 0708314899

3.22 *ibid*, 4, 6

people would be contemplating marriage and starting a family. Figure 26, below, shows the gender ratio for the sub-districts within the study area in relation to the mean value for Wales and Monmouthshire for the age group, 25-34 years. The national figure is 105 males for every 100 females. As this is an average there must have been areas where the male:female ratio was, at a local level, very much higher than 105:100. By comparison, all the values derived for all the localities within the study area returned markedly lower values for male:female ratio. This chart does not demonstrate any significant effect due to the loss of young men from the lead mining areas, such as Rheidol, and any outward movements of young women are, by the nature of the calculations, masked by other factors.

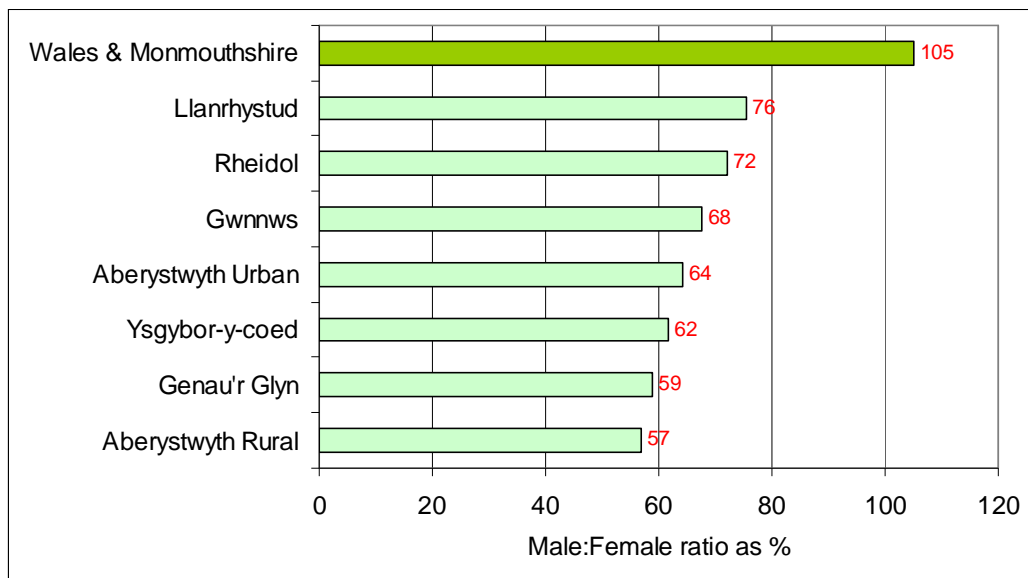


Figure 26 – Ratio of males:females, 25-34 age group

It is possible to calculate the values for male:female ratios for selected registration (not geographic) counties by reference to the 1891 census

summary reports^{3.23}. Figure 27, below, shows the national value for the 25-34 age group for the national population alongside Ceredigion, together with industrialized Glamorgan and rural Meirionnydd. This provides further evidence that young men were probably attracted from Ceredigion to the collieries and associated heavy industries of Glamorgan by the higher rates of pay designed to meet the manpower needs of the area. The loss of this cohort can be seen to seriously impact on the prospects of those young women contemplating marriage to a native of their own locality or county. Although it is difficult to obtain figures for marriages at sub-district level the annual reports of the Registrar General provide useful values for births. With

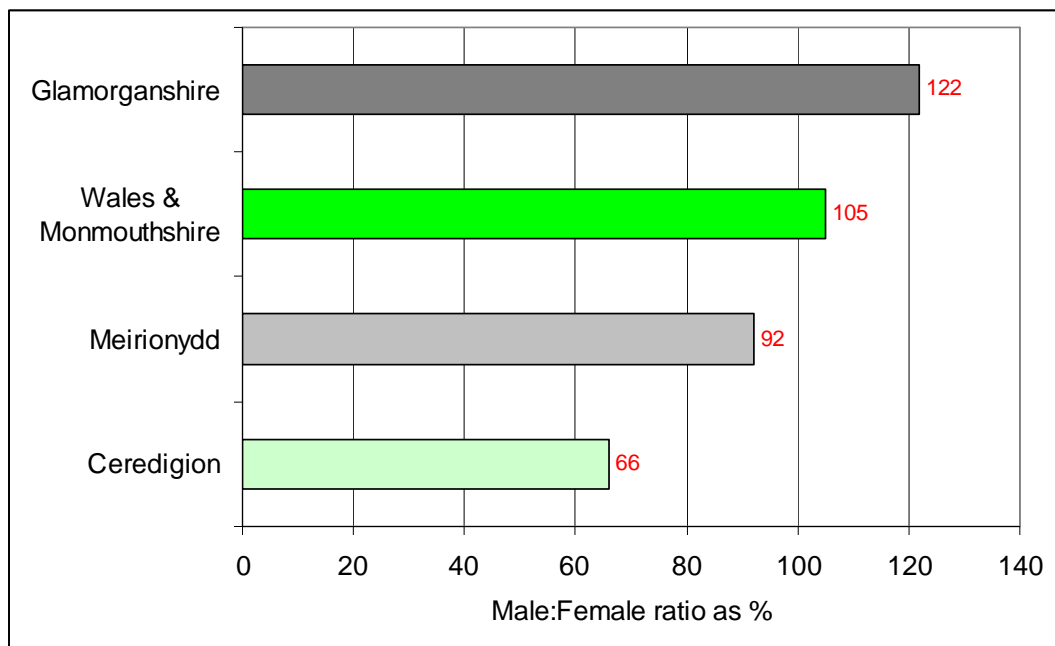


Figure 27 – Ratio of males:females, 25-34 age group; comparison with other counties – 1891 census

3.23 Registrar-General, 1893. *Census of England and Wales 1891. Ages, Condition as to Marriage, Occupations, Birth-places and Infirmities Vol III*. London: HMSO, 491
 General, 1892. *Fifty-fourth Annual Report (for 1891)*.

these figures^{3.24}, together with the respective population totals, it is possible to calculate birth rate as events per 1000 population. Aberystwyth urban and rural is returned as one sub-district. If Figure 28, below, is compared with Figure 15, above, it can be seen that trends in birth rate broadly track lead mining activity, thus confirming, in quantitative terms, the importance of this extractive industry to the economic and social fabric of north Ceredigion throughout the nineteenth century.

The decline of this industry has left a physical legacy which may still be seen today in the form of former mine workings and abandoned settlements that

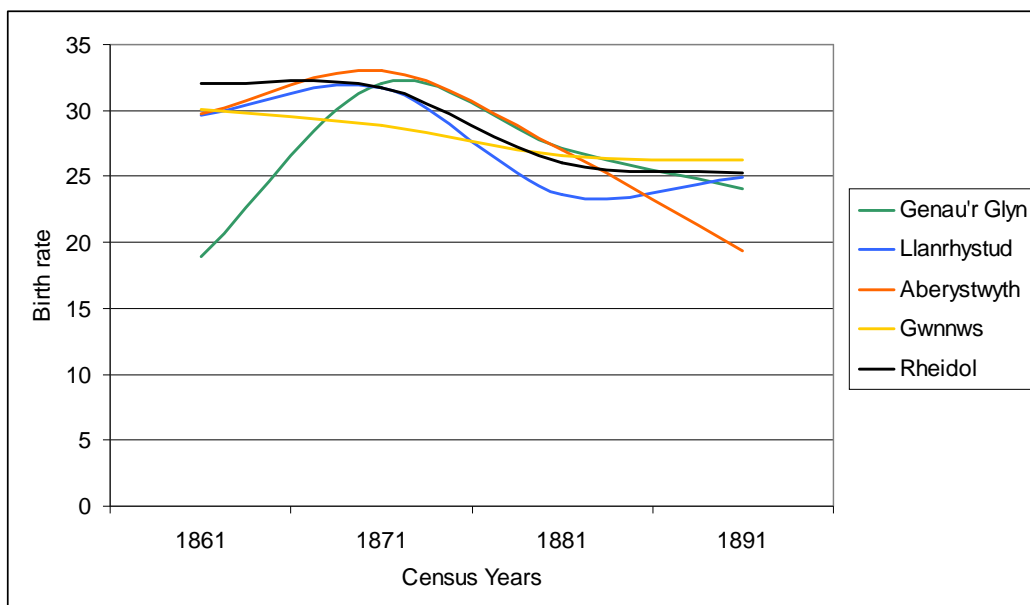


Figure 28 – Change in birth rate, events per 1000 population, 1861 to 1891

bear testimony to the resulting depopulation from which many communities never recovered – see Figure 29, below.

3.24 Registrar-General, 1863. *Twenty-fourth Annual Report of Births, Deaths and Marriages in England* (for 1861). London: HMSO: Registrar-General, 1873. *Thirty-fourth Annual Report* (for 1871); Registrar-General, 1883. *Forty-fourth Annual Report* (for 1881); Registrar-General, 1892. *Fifty-fourth Annual Report* (for 1891)



Figure 29 – Cwmystwyth in 2010

3.5 Conclusions

This chapter provides numerical evidence for structural imbalances in population age structure and gender ratio that supports the observations of other commentators and draws comparisons with other, selected, counties. The numerical evidence suggests how changes in one area of commercial activity resulted in far-reaching demographic and social trends over succeeding generations. It is shown that the decline in extraction of non-ferrous ores resulted in the exodus of men from the mining communities with major implications for the viability of these areas over the longer term.

Chapter 4 - Analysis and discussion of place of birth, including studies of mobility at a local and area level; patterns of inward migration

4.1 Introduction

In this chapter an attempt is made to examine migration and mobility through an analysis of reported place of birth relative to reported place of residence. The data are analysed and the levels of movements of people within the study area and into the study area are derived. This part of the study deals with concepts and reported values that may lack arithmetic precision. The values that are derived are no more than best estimates due to inherent uncertainties in the source data. These uncertainties reflect, in the main, the fluid nature of parish boundaries over time combined with the creation of civil *and* ecclesiastical parishes. With these limitations in mind, the aim here is to provide a measure of both internal mobility and inward migration from outside the county and then relate those measures to the economic structure as it was developing by 1891. The study cannot, of course, shed any detailed light on the considerable levels of outward migration, beyond the rather superficial discussion in chapter 3.

Information on the place of birth of a subject was first provided in the census of 1851. Cooper^{4.1} points out that the information offered and recorded was not always reliable or sufficiently robust to allow of meaningful interpretation.

4.1 Cooper, K, 2009. Trefeurig, 1851-1891: A case study of a lead mining township. *Ceredigion*, 16 (1), 93

She observes:

. . . .the most common problems were: a farm name rather than a parish being given as a birthplace, and county of birth given but with no town or parish specified.

That experience is confirmed in the present study. Extremes in standards of reporting were found. In some cases a recognisable town or parish of birth was not provided. It appears that some subjects considered that the enumerator would be more interested in the name of the house or the farm where they were born, rather than the parish! Some entries were ambiguous – simply recording ‘Llanbadarn’ could mean that the subject was born in Llanbadarn Fawr or Llanbadarn Odwyn or Llanbadarn Trefeglwys (Llanbadarn Fach). So, whilst the source data are less than perfect it is claimed here that the volume of information encompassed within the present study, combined with some attempt at an added-value enhancement of imperfect entries does provide a basis for meaningful analysis. Place of birth, unlike place of residence, should not be a parameter that is overly susceptible to the vagaries of the one night in ten years ‘snapshot’ effect.

4.2 Methodology

In the two parishes that comprised the urban area of Aberystwyth in 1891 there were 4 935 subjects who gave their county of birth as Cardiganshire. For 188 of these subjects it was not possible to unambiguously determine the respective parish of birth within Ceredigion and so they have been recorded only under county of birth. That crude exercise did however show that it was

possible to determine parish of birth for at least ninety-six per cent of Ceredigion-born subjects with a reasonable degree of confidence. That level of confidence has been achieved through the development of an appropriate and disciplined system of classifying parishes by name and alpha-numeric code; this classification accounts for more than 1 000 coded parishes across the thirteen counties of Wales.

There is some uncertainty when it comes to relating the parish structures that existed in April 1891 to changes in parish identities and boundaries that may have occurred over the lifetime of the subject. Because of these uncertainties the values calculated and presented in this chapter should be perceived only as broad indicators. In her study, Cooper examines Trefeurig as a township within the ecclesiastical parish of Llanbadarn Fawr and that is correct. In the present study Trefeurig, being but one example, is treated as a parish in its own right, encompassing the settlements of Penrhyn-coch, Penbontrhydybeddau, Cwmsymlog, Cwmerfyn and Banc-y-Darren. The differences between civil parish and ecclesiastical parish also contribute subjectively to the uncertainties encountered. At parish, hamlet and settlement level the identities of the locations should not be seen as absolute and a degree of interpretive licence must be tolerated. Nevertheless, despite such shortcomings it will be shown that meaningful conclusions can be inferred from a pragmatic treatment of the data.

In capturing the relevant information it was known that two issues would need to be addressed; consistency of naming and then coding of entries to permit meaningful sorting and analysis within the Excel database. Consistency of

naming and the injection of some discipline was achieved by transcribing locations in the form recommended in Davies^{4.2} and with further reference to Williams and Watts-Williams^{4.3}. Coding of entries was achieved by adapting, with permission, an existing system based on the standard Chapman county codes and further developed by drilling down to parish level. This existing system is one used by Cymdeithas Hanes Teuluoedd Gwynedd for the treatment of records relating, principally, to the pre-1974 counties of Ynys Môn, Caernarfon and Meirionnydd and then applied to the remaining ten counties of Wales. Parish names were converted, at transcription, into the formal Welsh spellings that appear in the schedules^{4.4}. Anglicised spellings or versions of place names in the Gwynedd schedules were converted into the Welsh forms and then discarded to improve consistency, to save space and to draw a distinction between the original enumerators' returns and the underlying database that forms the basis of this study. For example when Waen fawr, Wainfawr or Waun-fawr appeared in the enumerators' returns all were transcribed as Waunfawr. The township of Waunfawr, Ceredigion was cross-referred to the parish of Llanbadarn Fawr, coded CGN 24; the parish of Waunfawr, Caernarfonshire was coded as CAE 73. These measures are further, practical examples of the underlying objective which is to achieve an 'added-value' outcome. The enhanced C H T Gwynedd schedule of county

4.2 Davies, E, ed, 1967. *Rhestr o Enwau Lleoedd/A Gazetteer of Welsh Place-Names*. Cardiff: University of Wales Press. ISBN 0708310389

4.3 Williams, C J and Watts-Williams, J, 1986. *Cofrestrï Plwyf Cymru/Parish Registers of Wales*. Aberystwyth: National Library of Wales & Welsh County Archivists Group. ISBN 0907158145

4.4 Interestingly, for Ceredigion, there are only three place names that appear to be English in origin and which may not be corrupted forms of original Welsh-language spellings – unlike, for example, Strata Florida. These three are Bow Street, Chancery and Staylitttle (near Dôl-y-Bont and not to be confused with Staylitttle near Llanbryn-mair).

and parish names together with the associated codes is appended at C; this is not an original piece of work. For birth counties across Wales but outside Ceredigion the parish identities were those set down by Davies^{4.5} with ‘as-reported’ names being converted upon transcription. In the case of Ceredigion birth hamlets and townships, and even houses and holdings, the locations were allocated to the appropriate parish code, for example:

Nant-y-moch *gweler/see* Melindwr CGN 73

It must be a truism that an enumerator operating within a locality in Ceredigion would have detailed knowledge of the settlements in that locality but for places at some distance removed would not have the ability or the motivation to report places of birth with the same degree of precision.

The over-riding aim in the present study has been to measure, at the level of the individual, how many subjects lived in their parish of birth, how many in the locality of that parish, and how many within their county of birth. The ‘fuzziness’ of the transcribed data was addressed by relating neighbouring parishes to the ‘parent’ parish where neighbouring is defined as contiguous. For example, subjects living in the two parishes that comprised Aberystwyth Town (St Michael and Holy Trinity) and who were born in those two parishes were measured as a first order. As a second order, residents of Aberystwyth who were born in the contiguous parishes of Llanbadarn Fawr, Llangorwen and Llanychaearn were derived and aggregated as a single value. As a third order, residents of Aberystwyth who were born in remaining parishes in Ceredigion were derived and aggregated. Because Llangorwen was not

4.5 Davies, E, ed, 1967. *Rhestr o Enwau Lleoedd/A Gazetteer of Welsh Place-Names*. Cardiff: University of Wales Press. ISBN 0708310389

created until 1842 any natives of that parish older than about 50 years at the time of the 1891 census may have, understandably, provided ambiguous answers to the question on parish of birth.

All subjects in the study area born in the thirteen counties of Wales were coded, sorted and counted by stated or inferred parish of birth. Subjects born in England were identified only at county level and subjects born in Scotland, Ireland or foreign parts were identified only at country level.

For example,

Margaret Jones	born Ystrad Meurig	CGN 71
John Rees	born Ystradyfodwg	GLA 125
Eliza Griffiths	born Ludlow	SAL
Daniel Neismith	born Glasgow	SCT

4.3 Use of census data in migration studies

Using the comprehensively indexed transcriptions of the 1881 Census for England and Wales, Nair and Poyner^{4.6} attempted to locate nearly 1 200 individual subjects who were born, or stated that they had been born, in four identified rural Shropshire parishes, and were then living elsewhere. The study was designed to assess the degree of out-migration resulting from a decline in the rural Shropshire economy. It was found that most migrants moved only short distances and remained embedded within the rural economy. Only a minority moved greater distances to urban areas. Access to the railway network was found to have little influence on the migration pattern.

4.6 Nair, G and Poyner, D, 2006. The Flight from the Land? Rural Migration in South-east Shropshire in the Late Nineteenth Century. *Rural History*, 17, (2). 167-186

Young, single, women were found to move over relatively longer distances in order to find employment as domestic servants. Most skilled agricultural workers, such as ploughmen or stockmen, appeared to be reluctant to move to towns where their established skills would be of little benefit in the labour market or provide any advantage or recognition in terms of social status. The study concluded that most migrants moved only short distances and that the majority of male migrants maintained their rural or agricultural skills. It was thought to be worthy of comment that none of the Shropshire migrants in the sample population moved to the south Wales coalfield. The authors of the rural Shropshire study have summarized their findings as 'a trickle to towns rather than a wholesale flight from the land', very different to the situation found in Ceredigion.

Philip N Jones^{4.7} has reported on a detailed study of two valleys in south Wales, the Garw and Ogmore using CEBs for 1881 (the most recent census returns available at the time of the research), and paying particular attention to the role played by inward migrations; he uses the term 'colonisation'. This study considered migration flows, the residential patterns adopted by incomers, and the effects of family and parent village ties.

It was found that twenty-seven percent of heads of households in the study population were born in the rural counties of Wales with four percent coming from Ceredigion. Thirty-six percent of residents categorized as lodgers were from rural Wales; within this cohort ten percent came from Ceredigion. Using

4.7 Jones, P N, 1987. *Mines, Migrants and Residence in the South Wales Steamcoal Valleys: The Ogmore and Garw Valleys in 1881*. Hull: Hull University Press, 2. ISBN 0859584623

the Ancestry.com commercial service^{4.8} it was possible to calculate, as a rough approximation, the proportions of subjects born in Ceredigion in the county of Glamorgan in 1891: there were 8 244 males and 5 034 females, of all ages. This compares with 10 649 males and 8 405 females from Pembrokeshire, and 1 110 males and 489 females from Meirionnydd. In 1891 the population of Glamorgan was 363 252 males and 329 820 females^{4.9}. It is perhaps useful, given the attention paid to this topic in the literature, to set the flow of Ceredigion-born subjects into Glamorgan in context. In 1891 there were 6 908 males and 4 867 females from Ireland enumerated in Glamorgan. This figure, together with those for the rural Welsh counties cited above, is dwarfed by the 15 543 males and 11 040 females resident in Glamorgan who had crossed the Bristol Chanel from Somersetshire. O'Leary records that, in 1891, there were nearly 20 000 subjects born in Ireland who were resident in Wales and Monmouthshire. An Irish connection with Ceredigion merits no more than an oblique reference in a footnote^{4.10}.

4.4 Comparative analysis of data

The methodology can be demonstrated by looking at the values obtained for the parish of Llanilar in the sub-district of Llanrhytud, RG12/4557. Llanilar, coded CGN 47, is comprised of three enumeration districts, numbers 1, 2 and

4.8 <http://search.ancestry.co.uk/iexec/?htx=List&dbid=6897&offerid=0%3a7858%3a0>
[Accessed 21 Feb 2011]

4.9 Jones, D, 1998. *Statistical evidence relating to the Welsh language 1801-1911*. Cardiff: University of Wales Press, 17. ISBN 0708314600

4.10 O'Leary, P, 2000. *Immigration and integration. The Irish in Wales, 1798-1922*. Cardiff: University of Wales Press, 127. ISBN 0708317677

3, with a combined recorded total population of 715 subjects. It was possible to determine parish or county or country of birth for all of these; there were, perhaps unusually, no 'not knows'. 377 of these subjects were born in Llanilar parish. There were six neighbouring or contiguous parishes:

Llanddeiniol – coded CGN 28; Llangwryfon – coded CGN 43; Rhostie – coded CGN 62; Llanfihangel-y-Creuddyn – coded CGN 38; Llanbadarn Fawr – coded CGN 24; Llanychaearn – coded CGN 56.

These accounted for a further 119 residents. 160 residents of Llanilar were born in more distant parishes in Ceredigion, thirty-three in the remaining twelve counties of Wales, 15 in England and 5 in Foreign Parts. These

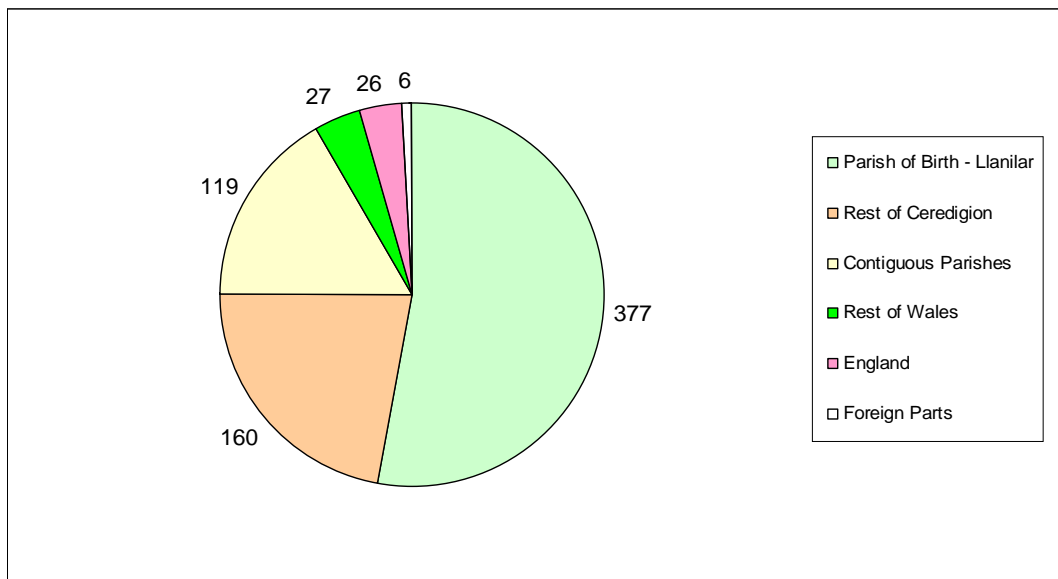


Figure 30 – Recorded place of birth for residents of Llanilar Parish

proportions are shown, as numerical values, in Figure 30, above. Expressed as percentages, from this pie chart, it can be seen that fifty-three per cent of residents had been born within the parish; that sixty-nine per cent were born in Llanilar and neighbouring parishes; and that, in aggregate, ninety-two per

cent of residents had been born within the county of Ceredigion. Only four per cent came from elsewhere in Wales and five per cent from England and beyond.

After describing the methodology, using the parish of Llanilar as an example, the remainder of this chapter analyses place of birth at sub-district level rather than parish level. This, it is suggested, is a realistic approach given the uncertainties detailed earlier. Consideration of movement and intra-parish migration of natives of Ceredigion within their own county is then discussed, followed by a study of patterns of inward migration from the rest of Wales, and then from English counties.

4.4.1 Mobility in Llanrhystud registration sub-district

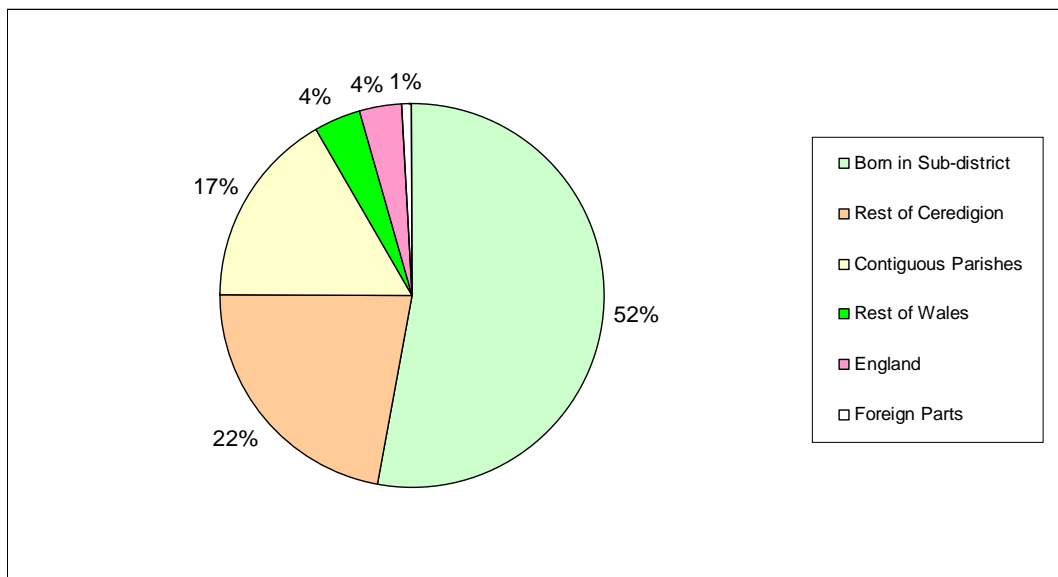


Figure 31 – Recorded place of birth for residents of Llanrhystud registration sub-district

Place of birth was determined for each subject resident on census night in the parishes of Llanddeiniol, Llangwryfon, Llanilar, Llanrhystud and Rhostie (Figure 8). The aggregated values across the sub-district are shown, as percentages, in the pie chart, shown above as Figure 31. Fifty-two per cent of residents were born within the sub-district and ninety-one per cent were natives of Ceredigion.

4.4.2 Mobility in Aberystwyth Urban sub-district

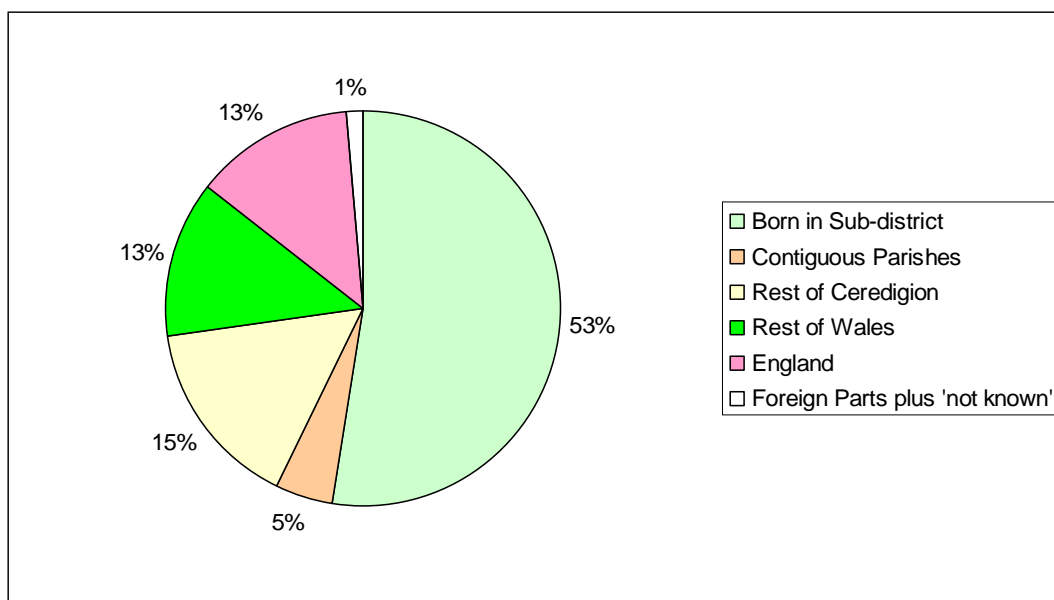


Figure 32 – Recorded place of birth for residents of Aberystwyth Urban registration sub-district

Place of birth was determined for each subject resident on census night for the combined parishes of St Michael and Holy Trinity with the results shown, as percentages, in the pie chart, Figure 32, above. This shows that twenty-seven per cent of recorded subjects were born outside Ceredigion with fourteen per cent born outside Wales; predominantly in England.

4.4.3 Mobility in Aberystwyth Rural registration sub-district

Place of birth was determined for each subject resident on census night in the parishes of Llanbadarn Fawr, Llangorwen and Llanychaearn. The aggregated values across the sub-district are shown, as percentages, in Figure 33, below,

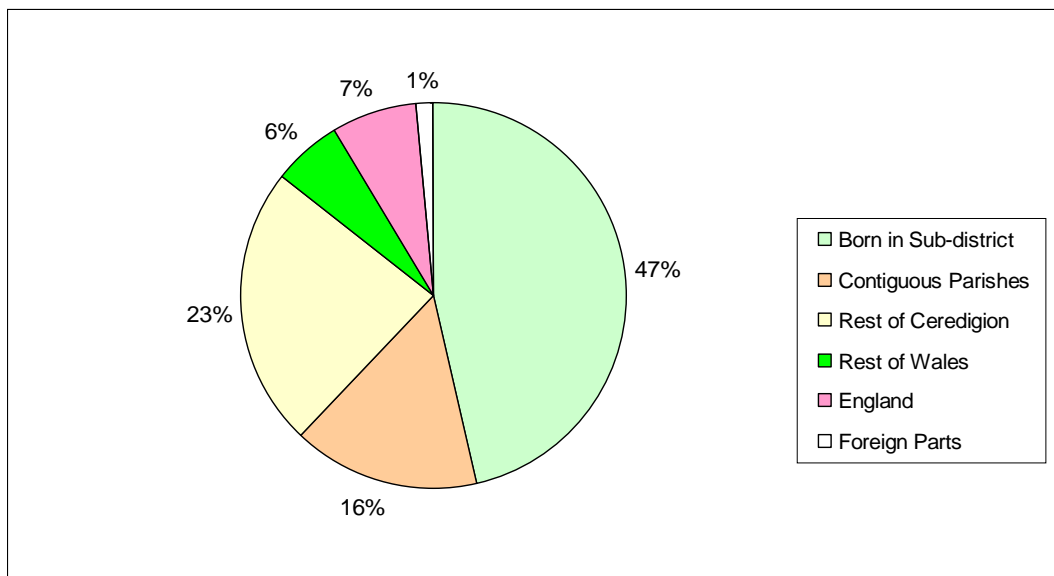


Figure 33 – Recorded place of birth for residents of Aberystwyth Rural registration sub-district

The proportion of subjects born outwith the sub-district was, at fifty-three per cent, relatively high, though eighty-six per cent of residents were born in Ceredigion. This suggests some movement into the area from the rest of the county.

4.4.4 Mobility in Rheidol registration sub-district

Place of birth was determined for each subject resident on census night in the parishes of Elerch, Llanfihangel Genau'r-glyn and Llangynfelyn. The

aggregated values across the sub-district are shown, as percentages, in the pie chart, Figure 34, below. This shows that the proportion of subjects born locally was sixty-four per cent; higher than the figure of forty-seven per cent for the contiguous sub-district of Aberystwyth Rural (Figure 33). The proportion of subjects born in England was only three per cent and this low value suggests,

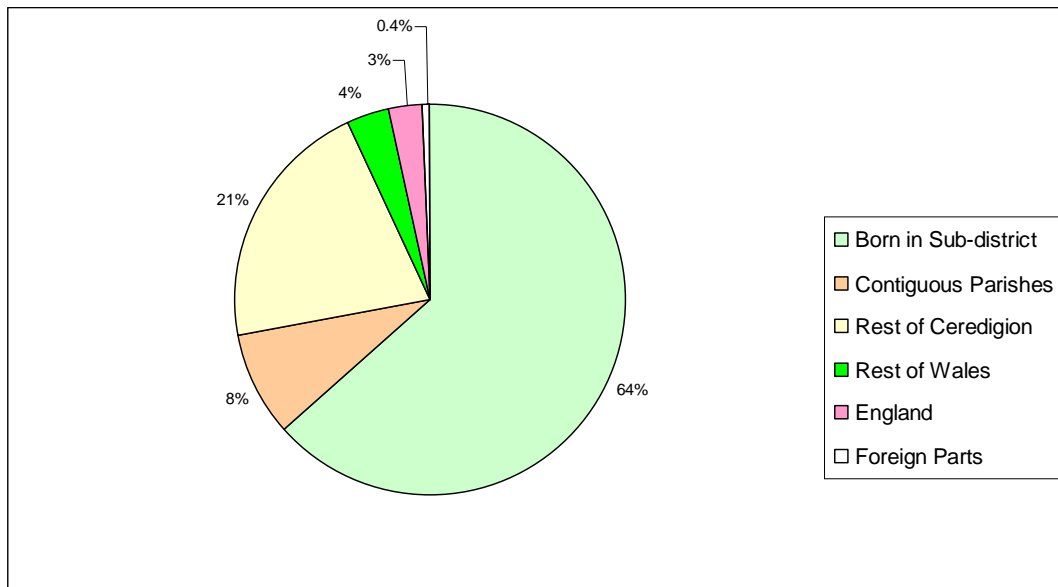


Figure 34 – Recorded place of birth for residents of Rheidol registration sub-district by way of speculation, that many of the lead miners who may have originally come from Cornwall and Derbyshire had moved on by 1891.

4.5 Interpretation of mobility data across the study area.

The native or indigenous components of populations at parish level in the rural sub-districts of Llanrhystud, Geneu'r Glyn, Rheidol and Gwnnws all fell in a narrow band between sixty per cent and sixty-four per cent (Figure 35, below). This implies a degree of stability in the composition of the population

of these areas. Aberystwyth Town produced a lower value of fifty-three per cent but, rather surprisingly, Aberystwyth Rural returned the lowest value at forty-seven per cent, showing that more than half the residents of the three constituent parishes were incomers. This is an interesting result and it is suggested that a number of incomers settled in the parishes surrounding the town providing some evidence for the suggestion made by Bowen that Llanbadarn village was becoming favoured as a commuter suburb of Aberystwyth^{4.11}.

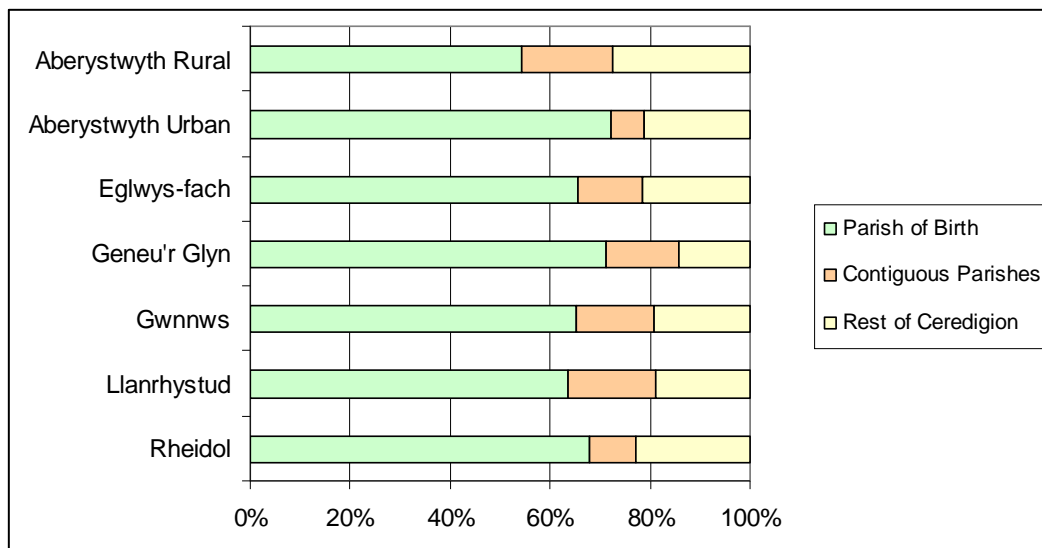


Figure 35 – Mobility of Ceredigion-born residents

Figure 35, above, shows the relative proportions, as percentages, of indigenous residents, of those born in contiguous parishes and those born further out across Ceredigion for those residents who indicated that they were born in parishes within the county. There are no extreme variations between the sub-districts. However it can be seen that Aberystwyth Urban tended to

4.11 Bowen, E G, 1979. *A History of Llanbadarn Fawr*. Llandysul: Gomer Press, 132. ISBN 0850885027

have more residents born within the two parishes (St Michael and Holy Trinity) than manifestly rural communities such as Gwnnws and Llanrhystud. It is suggested that this modest difference indicates that the urban area had a more stable Ceredigion-born population than the more volatile rural hinterland. That reflects, perhaps, the level of instability in the agricultural and mining communities. The perceptible difference between the proportion of indigenous subjects in Aberystwyth Urban and Aberystwyth Rural sub-districts is interesting. This suggests that some rural communities outside the town may have been relatively more mobile and gives further credence to Bowen's opinion that some individuals may have lived outside Aberystwyth and commuted to work in the Town. The data presented here certainly indicate a higher level of mobility in the parishes of Llanbadarn Fawr, Llangorwen and Llanychaearn than in St Michaels and Holy Trinity.

In an attempt to examine the evidence for the origins of subjects born outwith the study area, Figure 36, below, shows the numbers identified as being born in the other twelve counties in Wales. It is not surprising that there should be significant inward movement from the counties that border on Ceredigion – Montgomeryshire, Meirionnydd and Carmarthenshire. The second most important contributor in this ranking is Glamorganshire thus confirming the familial, social and commercial links between Ceredigion and that county. Of course, the recorded places of birth illustrated here do not distinguish between subjects who were long-term residents, or students, or brief visitors and tourists.

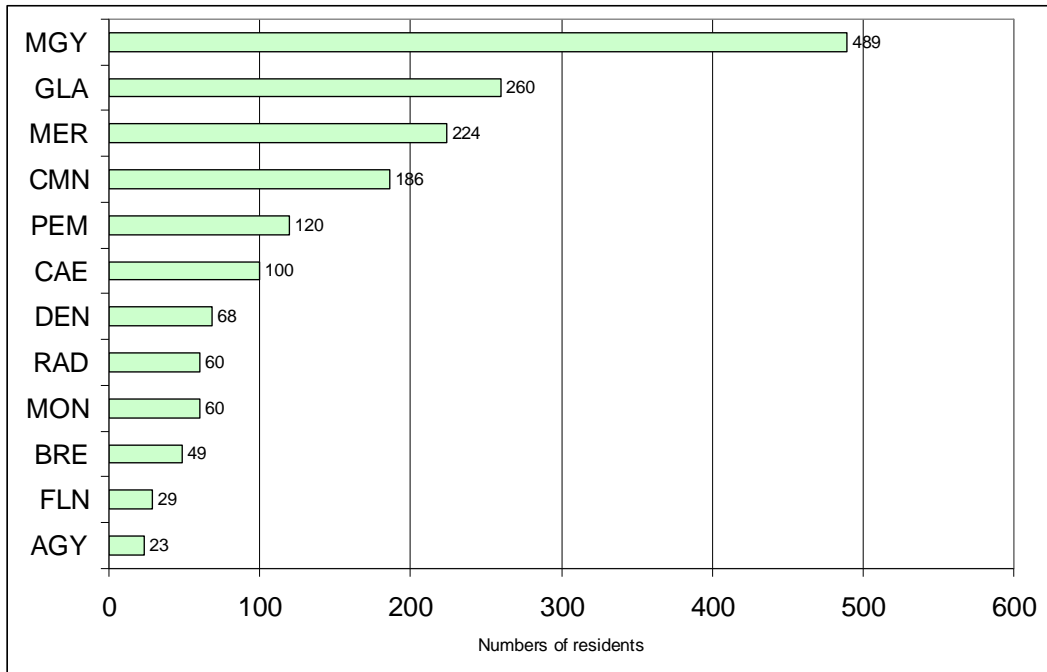


Figure 36 – Residents of the study area born in Wales

Figure 37, below, shows the numbers of residents of the study area whose

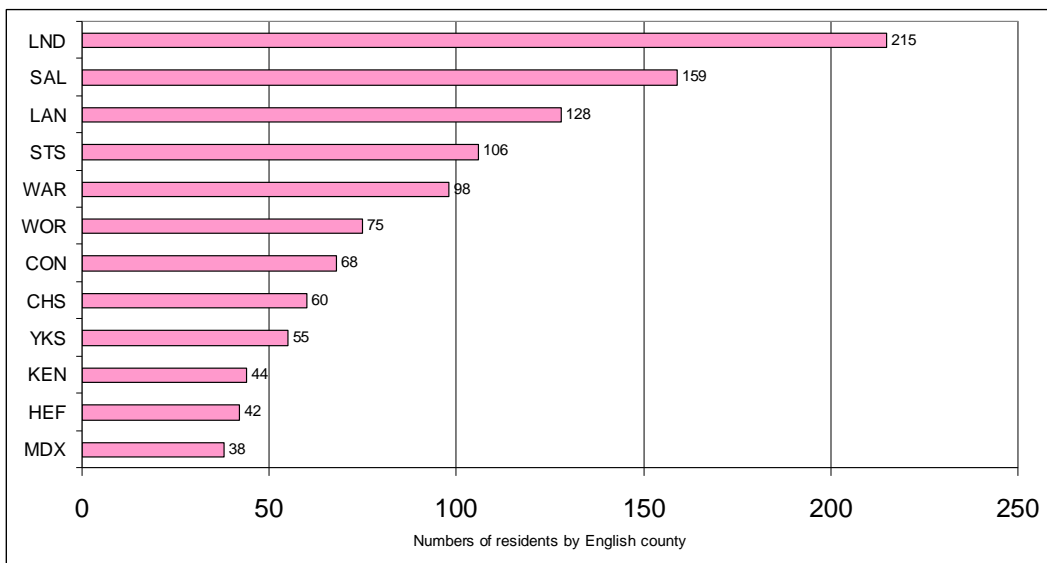


Figure 37 – Residents of the study area born in England

place of birth is in England. To be more precise, those whose place of birth is in the twelve statistically most significant English counties. These twelve selected counties accounted for seventy-five per cent of migrants and visitors

from England; the remaining twenty-five per cent were from some thirty other counties and these, being regarded as having less statistical significance, are ignored.

London is the largest contributor along with Middlesex and Kent, confirming the familial and commercial links between Ceredigion and the London Metropolitan area. It is not surprising that the West Midlands is confirmed as a source of migrants with natives of Shropshire, Staffordshire, Warwickshire and Worcestershire taking advantage of the improved railway connections across mid-Wales. Lancashire and Yorkshire are significant contributors, not least because the massive populations of their industrial conurbations dominated English demographics at the end of the nineteenth century. A number of commentators have referred to the movement of workers from Cornwall (ranked seventh) to the lead mines of Ceredigion and these data confirm this to be so; even after mining activity had peaked and was in sharp decline.

In the Aberystwyth Urban area seventy-two per cent of residents were born in Ceredigion and a further thirteen per cent came from other parts of Wales. Fourteen per cent came from England and places farther afield. Figure 38, below, illustrates the twelve most common areas of origin for this tranche of the fourteen per cent of residents of Aberystwyth Town who were born outside Wales. Again, London, the West Midlands (Shropshire, Warwickshire, Worcestershire and Herefordshire) and the industrialised counties of Lancashire and Yorkshire were major contributors but with Ireland and Scotland now being included. These numbers suggest that, with the coming

of the railway and the establishment of the University College in Aberystwyth, the foundations of a more cosmopolitan society had been laid. Fourteen per cent of the residents of Aberystwyth Town were born outside Wales. This compares with two per cent in Llanrhystud, four per cent in Geneu'r Glyn, three per cent in Rheidol and just one per cent in Gwnnws sub-districts.

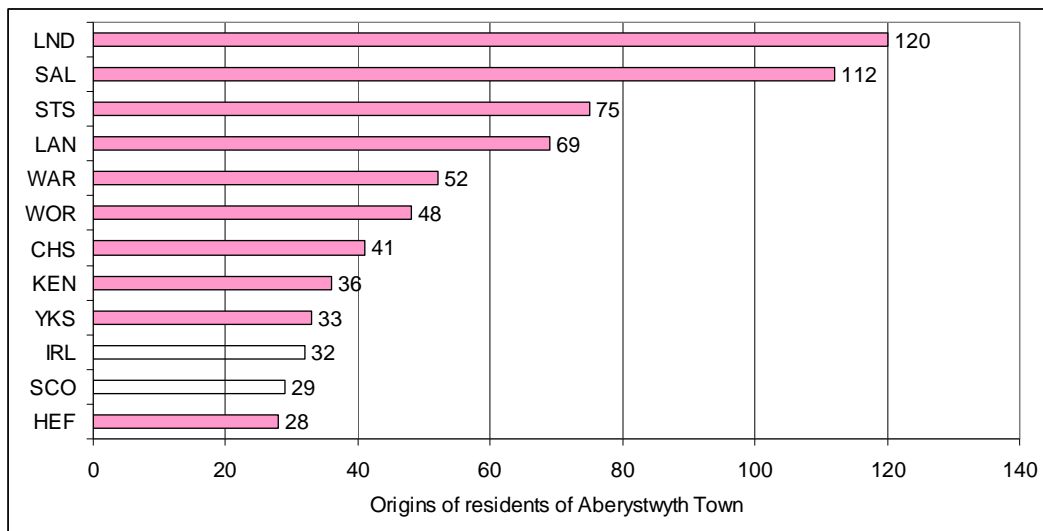


Figure 38 – Residents of Aberystwyth Urban area born in the twelve most significant counties and countries outside Wales

Aberystwyth Rural sub-district presents a more complex picture than the other rural areas. Eight per cent of subjects resident there were born outside Wales; Figure 39, below, provides some detail on the make-up of the incomers. The twelve statistically most significant locations accounted for seventy-three per cent of inward migrants. Again, London with Middlesex were significant locations, together with the West Midlands. Scotland and India also appear. Although only seven subjects were born in India, out of some 240 residents of the sub-district born outside Wales, that figure may provide a rather tenuous clue to the overall composition of society in

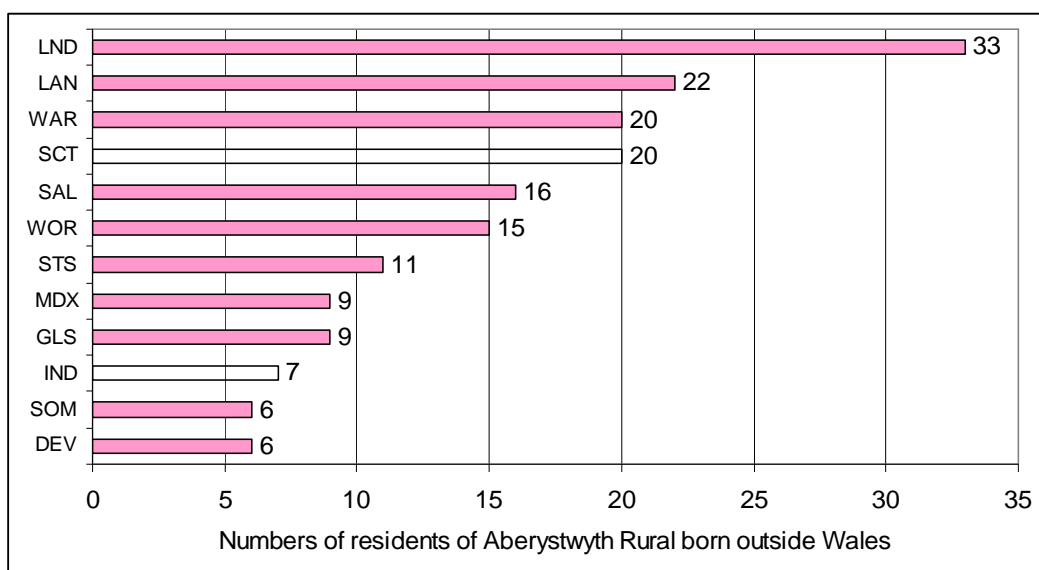


Figure 39 – Residents of Aberystwyth Rural area born in the twelve most significant counties and countries outside Wales

Aberystwyth Rural sub-district. Members of the minor gentry family of Evans of Lovesgrove, including servants, had been born in India where the head of the family was, at one time, Attorney General^{4.12}. The area around Aberystwyth Town was favoured as places of residence by a number of these families and they, together with middle-class professionals, often employed members of staff in their households who originated from outside Wales. That possibility will be examined more closely in chapter 8 on occupations.

The census summary reports for 1891 make possible a crude comparison between the registration counties of Ceredigion and rural Meirionnydd^{4.13}. Figure 40, below, shows, as percentages, the proportions of the population of Ceredigion giving their place of birth within the registration county, within the rest of Wales, within England, and elsewhere. Figure 41, below, provides a

4.12 *ibid*, 105

4.13 Registrar-General, 1893. *Census of England and Wales 1891. Ages, Condition as to Marriage, Occupations, Birth-places and Infirmities Vol III*. London: HMSO, 546-548

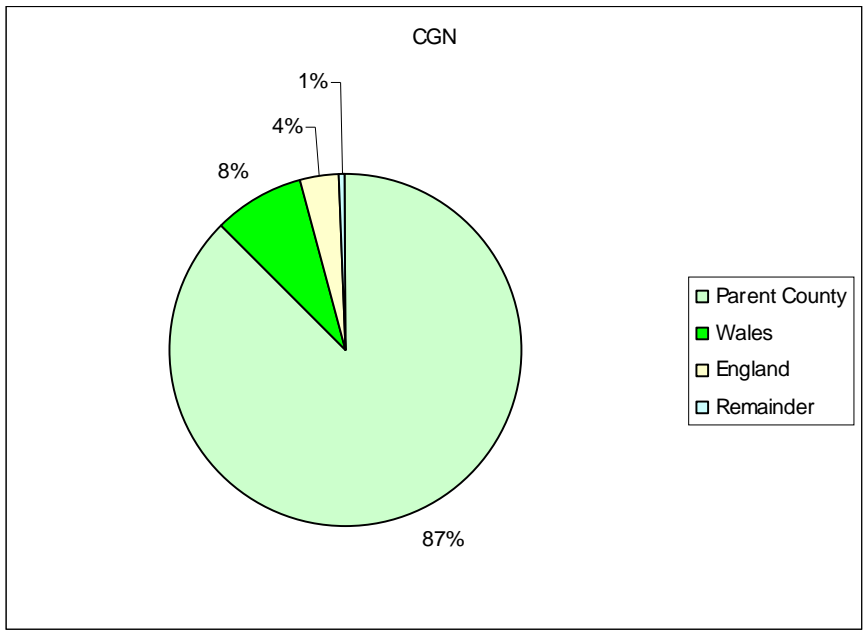


Figure 40 – Residents of Ceredigion and their place of birth

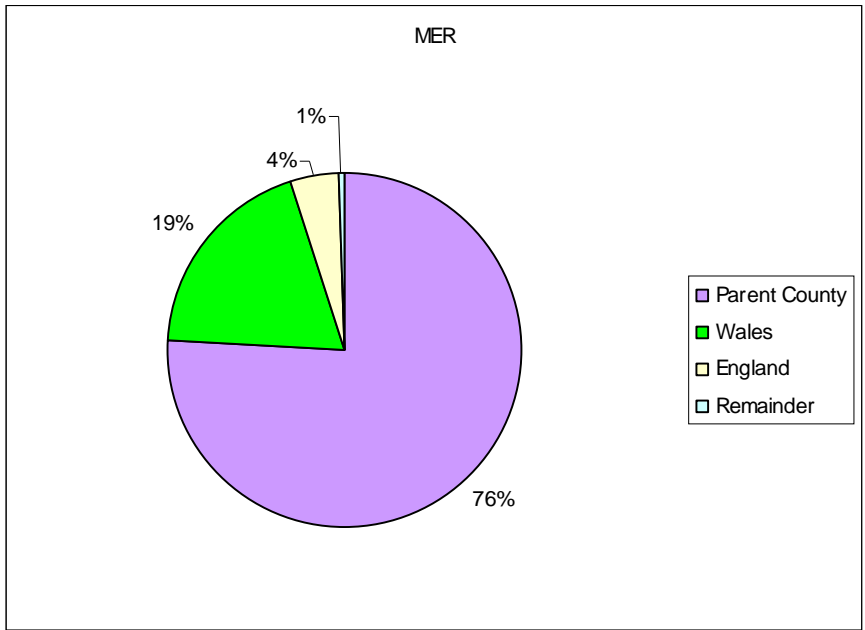


Figure 41 - Residents of Meirionnydd and their place of birth

comparison with the registration county of Meirionnydd and shows that there were twice as many incomers from the other twelve counties than were found

in Ceredigion. Again, this suggests, at the county level the population was relatively stable.

4.6 Conclusions

This part of the study has shown that it is possible to determine place of birth for a significant proportion of subjects at a defined level below county of birth. That information is then used to measure differences in movements of subjects with a reasonable level of confidence. There is no distinction made between long-term residents and visitors passing through the locality. That minor weakness is compensated for, as in other aspects of this study, by the methodology. There is some evidence that the rural communities were less stable than the more urbanized areas and reasons for this are suggested. The highest proportion of subjects from outside Wales is found in Aberystwyth Town together with the highest proportion of subjects born in the other twelve counties of Wales. The lowest proportion of Ceredigion-born subjects is found in the communities bordering the urbanized area. Using birth-place information it is possible to infer external connections with Glamorganshire and with London.

Chapter 5 - A study of the poor, the sick, the disabled, and marital status, with particular respect to widows and widowers

5.1 Introduction

In a study of the Ceredigion parish of Llansanffraid for the years 1841 and 1851, Spencer Thomas suggests that the census returns can be used to study the size of the family^{5.1}. Colin Thomas takes a somewhat contradictory view when he states that the family must never be regarded as being synonymous with the household, suggesting that household size has little or no meaning^{5.2}. It is, of course, not possible to conduct a study of family structures using census data alone. For a proper understanding of family structures it would be necessary to include information on births, marriages and deaths but for the late Victorian era that information is not wholly in the public domain. In some communities it might be possible to access these additional data through parish records but those are not relevant to the communities covered by the present study where a significant proportion of the population was not affiliated to the established church. Chapel records are notoriously fragmented and difficult to locate. The New Lanark study undertaken by Comber^{5.3} is an exceptional case. For that community it was possible to supplement census records with reliable family data collected by

5.1 Thomas, S, 1963. The enumerators' returns as a source for a period picture of the Parish of Llansanffraid, 1841-185. *Ceredigion*, 4, 416

5.2 Thomas, C, 1971. Rural society in nineteenth century Wales: South Cardiganshire in 1851. *Ceredigion*, 6 (4) 401-402

5.3 Comber, R E, 1997. *Nineteenth Century Fertility in a Scottish Textile Community: The Case of New Lanark*. Thesis (PhD) University of Leeds

the mill management. Family structures are not examined in detail in the present study although there is some discussion of the relationships in farming families in section 8.8.1, below.

This chapter considers the position of the disadvantaged in society, including residents of institutions and the provision made for paupers. Particular attention is paid to any differences that might be inferred about personal circumstances between the different communities across the study area.

5.2 The poor

Paupers were individuals in receipt of Poor Law relief. Under a statute of 1834 parishes were formed into unions in order to administer the system of relief of the poor. The term 'poor' referred to those who were elderly and infirm, sick or unemployed. A union was formed in 1837, based on Aberystwyth, with a Board of Guardians created to administer poor relief and oversee the management of the workhouse. A workhouse was established in Aberystwyth from 1841 capable of housing 200 inmates^{5.4}, located on the site now occupied by Ysbyty Bronglais on Penglais. In 1891 there were seventy-four inmates, forty of whom were females; their details are tabulated elsewhere^{5.5}. Dot Jones^{5.6} has described how paupers were classified into 'indoor' and 'outdoor' and then as 'able-bodied', 'not able-bodied', 'insane'

5.4 Davies, A E, 1998. Poor law administration in Cardiganshire, 1750-1948. *In: Jenkins, G H and Jones, I G, eds. Cardiganshire County History Volume 3 Cardiganshire in Modern Times.* Cardiff: University of Wales Press, 331. ISBN 0708314899

5.5 Williams, P G, Oct 1999. The Aberystwyth Union Workhouse in 1891. *Journal, Cardiganshire Family History Society*, 2 (3) 63-65

5.6 Jones, D, 1980. Pauperism in the Aberystwyth Poor Law Union 1870-1914. *Ceredigion*, 9 (1) 78-101

and 'vagrant'. Indoor paupers were those who were inmates resident within the workhouse whilst outdoor paupers remained within the community where they were eligible for aid in the form of cash payments. Paupers, and vagrants, were recognised in the classification of occupations which is discussed in more detail in chapter 8. At the end of the Booth-Armstrong classification of occupations^{5.7} there is a section 'Indefinite' or IN, comprising sub-section IN02 – Vagrants, paupers, lunatics, prisoners. Gerald Morgan suggests that most paupers continued to receive outdoor relief, going on to state that '... workhouses only dealt with a small minority of the poor, mostly those who were too helpless to survive outside an institution. ...'^{5.8}.

Figure 42, below, shows the numbers (these being actual not relative values) of outdoor paupers listed for each enumeration district in the study area. It can be seen that outdoor paupers in Rheidol enumeration district (thirty-

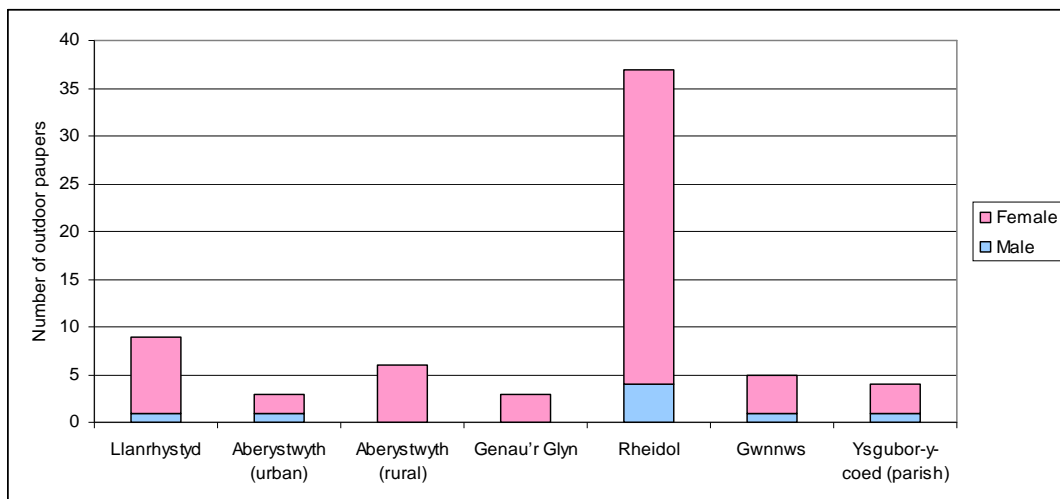


Figure 42 – Numbers of male and female outdoor paupers

5.7 Armstrong, W A, 1972. The use of information about occupation. In: Wrigley, E A, ed. *Nineteenth-century society. Essays in the use of quantitative methods for the study of social data*. Cambridge: University Press, 191-310. ISBN 0521084121

5.8 Morgan, G, 2006. *Ceredigion: a wealth of history*. Llandysul: Gomer Press, 310. ISBN 1843235013

seven subjects) exceed the combined total for all the other districts (thirty subjects). Gerald Morgan makes two telling comments that are relevant here and which might help to explain these crude numbers with females greatly out-numbering males. Firstly that ‘ . . . most men were slaves, and women the slaves of slaves . . . ’^{5.9}, and, ‘ . . . Women have always been, and still remain, a much larger percentage of the poor than their numbers warrant . . . ’^{5.10}. A variety of terms are used in census returns to describe the status of these subjects, including ‘Living on the parish’. The weighted mean age for men was sixty-one, and sixty-seven for women. Fifty-eight of the fifty-nine female outdoor paupers were spinsters or widows. It is suggested that the high number of poor women in Rheidol district reflects the relative poverty of the area resulting from the decline in lead mining. This decline in economic activity resulted in many men of all ages moving to other areas in order to find employment, resulting in the virtual abandonment of some older women. In the late Victorian era there was no old-age pension or state-sponsored social security provision. Older women, and men, had to wait until the social reforms introduced by the Asquith Liberal government, and, in particular under David Lloyd George’s Old Age Pensions Act of 1908^{5.11}.

The seventy-four inmates of the Aberystwyth Union workhouse at the time of the 1891 census are not be found in the returns for Aberystwyth urban area

5.9 *ibid*, 146

5.10 *ibid*, 141

5.11 Davies, A E, 1998. Poor Law administration in Cardiganshire, 1750-1948. *In*: Jenkins, G H and Jones, I G, eds. *Cardiganshire County History Volume 3 Cardiganshire in Modern Times*. Cardiff: University of Wales Press, 338. ISBN 0708314899; Lloyd George had declared that his wish was to ‘ . . . lift the shadow of the workhouse from the homes of the poor. . . ’. See <http://www.nationalarchives.gov.uk/humanrights/1848-1914/> [Accessed 14 Nov 2010]

but are listed under the township of Faenor Isaf in the ecclesiastical parish of Llanbadarn Fawr at RG12/4559 f 48-49 p 7-10 sch 48.

The returns for the Workhouse also included William Jones, the Master, his wife, Matron Mrs Mary Jones, their two children, a nurse, and a cook and domestic servant, Miss Mary Jenkins. There was also an 'industrial trainer', Miss Jane Rees, which suggests that some educational provision was available; there were eleven boys and five girls under the age of ten. There were twenty-three men in residence ranging from Henry Bubb, age eighteen, to three gentlemen all aged seventy-eight; a retired general labourer, a retired ship carpenter and a retired mariner. There were thirty-five women, the eldest being Mrs Elizabeth Edwards, age ninety-nine. Sixty-one of the seventy-four inmates were natives of Ceredigion. Twenty-two of the inmates are recorded as being mentally or physically handicapped. The census records confirm that the inmates of the workhouse generally were comprised of the elderly, frail and poorest in society.

5.3 The sick

Lewis^{5.12} describes the establishment and development of a hospital service in Aberystwyth throughout the nineteenth century whilst Thompson sets the management of hospital provision within a social context^{5.13}. Aberystwyth Infirmary, at the time of the 1891 census, was located in North Road. There

5.12 Lewis, W J, 1980. *Born on a Perilous Rock*. Aberystwyth: Cambrian News, 155-157. ISBN 0900439041

5.13 Thompson, S, 2003. 'Without any distinction of sect, or creed, or politics'? Charity and hospital provision in nineteenth-century Aberystwyth. *Ceredigion*, 14 (2) 38-56

were two surgeons in residence, Morgan John Morgan and Evan Evans, both members of the Royal College. The matron was Mrs Frances Ankers, a native of Wrexham, assisted by a nurse, a cook and a housemaid. There was one male patient and four female patients, including two 15-year old Aberystwyth girls. The professional standing of general medical and dental practitioners is further discussed in chapter 8.

5.4 The disabled

Benjamin^{5.14} has described his study on the incidence and range of disabilities recorded in census returns. He examined the returns for 1851, 1861 and 1871 for the area of north Ceredigion between Llanafan and the eastern and northern boundaries of the county. This area corresponds, approximately, with the present study area. The conditions that he examined, in as much detail as the returns allowed, were, blindness, deafness and insanity. He attempted to connect the incidence of these disabilities with environmental factors such as occupation, especially lead-mining but found no evidence of cause and effect. His methodology was more descriptive than semi-quantitative and was limited to the census returns alone. In the 1891 census disability was recorded in Column 16 – ‘If (a) Deaf-and-Dumb (b) Blind (c) Lunatic, Imbecile, or Idiot’. Benjamin found forty-three people recorded as Blind; in the present study there were thirty-one. He found thirty-one subjects who were deaf and/or deaf and dumb; in the present study there

5.14 Benjamin, E A, 1985. Human afflictions: A study of the North Ceredigion census returns, 1851-71. *Ceredigion*, 10, 155-160

were twenty-two. Benjamin found thirty-seven cases labelled as idiocy or insanity; in the present study there were forty-three. Figure 43, below, shows

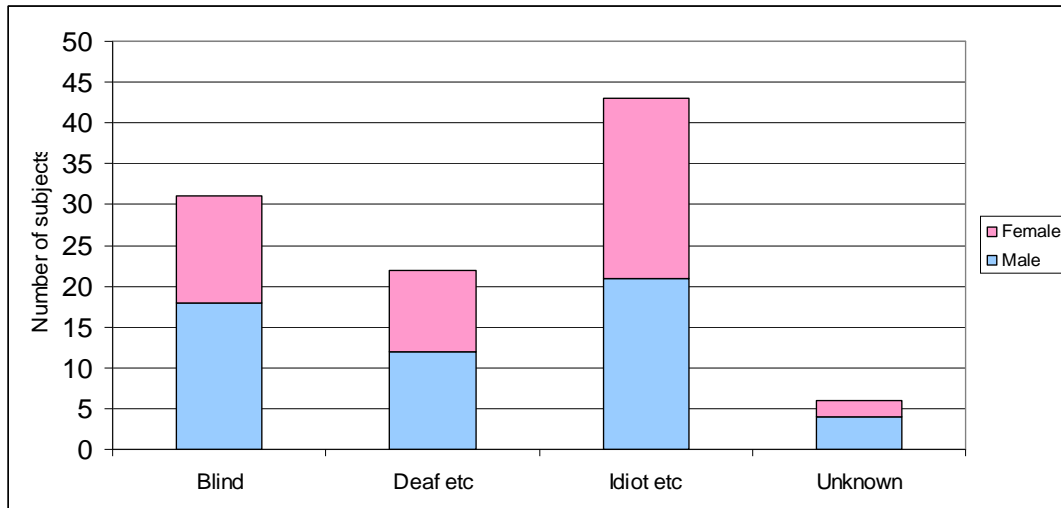


Figure 43 – Numbers of males and females across the study area with reported disabilities

the distribution of these recorded disabilities, by gender, across the study area. Of the 102 subjects categorised with some form of disability, twenty-two were inmates at the Union Workhouse. The weighted mean age for all males was forty-three years; for females it was forty-eight years. In his study Benjamin warns against reading too much into the descriptions of disabilities provided in census returns, suggesting that inaccuracies and distortions were likely to be present. Higgs^{5.15} reports that by 1881 the census authorities had realised that the information in the returns was likely to be unreliable through under-reporting of health conditions. There was an understandable reluctance on the part of parents or family members to formally admit that children or others suffered from a reportable condition. These difficulties were further

5.15 Higgs, E, 1991. *Making Sense of the Census*. London: HMSO, 74-76. ISBN 0114402191

compounded by a lack of clarity in, and lay understanding of the terms used. Clearly there was much that was subjective about the information provided. Higgs^{5.16} concedes that, in 1901, when the term ‘idiot’ was replaced by the less-offensive ‘feeble-minded’, the number of subjects so recorded increased. Even in later times, and in the context of a more highly educated and enlightened society than that which existed in 1891, Loudon reports difficulties in connecting observed behaviour and possible symptoms with suspected conditions of mental disorder^{5.17}. The 1891 census summaries reported the total numbers of blind, deaf and dumb, deaf and mentally deranged subjects for the registration counties across Wales^{5.18}. The raw

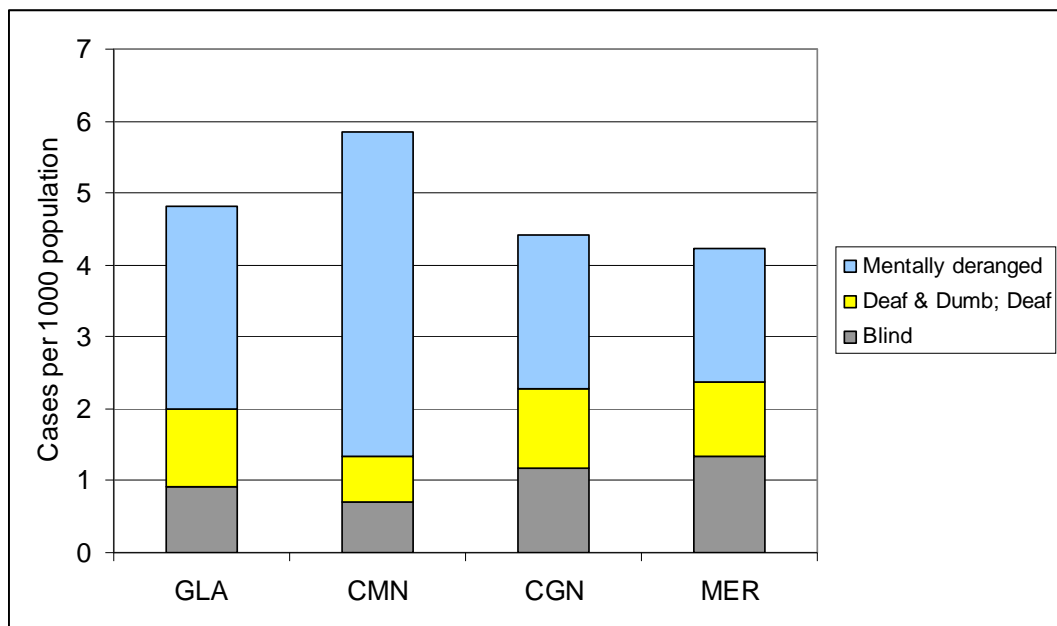


Figure 44 – Comparative numbers of subjects with disabilities.

5.16 *ibid*, 75

5.17 Loudon, J, 1969 Religious order and mental disorder: A study in a South Wales rural community. In: Banton, M, ed. *The Social Anthropology of Complex Societies*. London: Tavistock Publications, 89-91. ISBN 422714003

5.18 Registrar-General, 1893. *Census of England and Wales 1891. Condition as to Marriage, Occupations, Birth-place and Infirmities*. London: HMSO, Volume 3, 559

figures have been re-calculated as numbers of cases per one thousand population and the results for four selected counties are shown in Figure 44, above.

There is only one feature of real significance demonstrated by this graph. It may be noted that the number of cases of mental illness in Carmarthenshire is more than double that in Ceredigion. The answer is simple and obvious; mental patients from Ceredigion were accommodated at the Joint Counties Lunatic Asylum in Carmarthen during the second half of the nineteenth century with the result that the source data are heavily skewed.

5.5 The widows and widowers

The census returns report the marital status of each subject so it is a simple matter to calculate the proportion of single and married subjects and widows and widowers in the populations of each sub-district. Sub-districts and not individual parishes were chosen in order to maintain the integrity and utility of

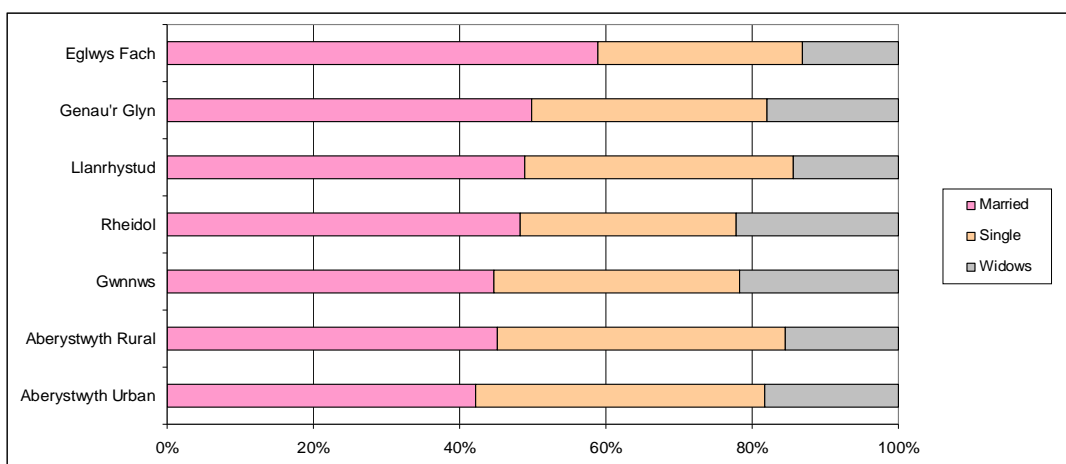


Figure 45 – Marital status of females aged 21 and over

the results derived from the source data. Subjects age twenty years and under were excluded from the analysis as twenty-one was the age that men and women were permitted to make independent decisions on the matter of marriage. Figure 45, above, is a stacked bar chart showing the relative proportions, as percentages, of single and married women and widows in the populations studied. It may be seen that there are some discernable differences in the compositions of the seven sub-populations analysed. The proportion of married women varied from forty-two per cent to nearly sixty per cent, with the rural areas being consistently higher than Aberystwyth Town and its surrounding parishes. The proportion of widows varied from fourteen to twenty-two per cent but there was no clear pattern in variation across the study area. The relative proportion of single women ranged from twenty-eight per cent to thirty-nine per cent with the rural parishes having fewer unmarried women than Aberystwyth Town and its surrounding parishes. There is a clear pattern that demonstrates that Aberystwyth had the lowest proportion of

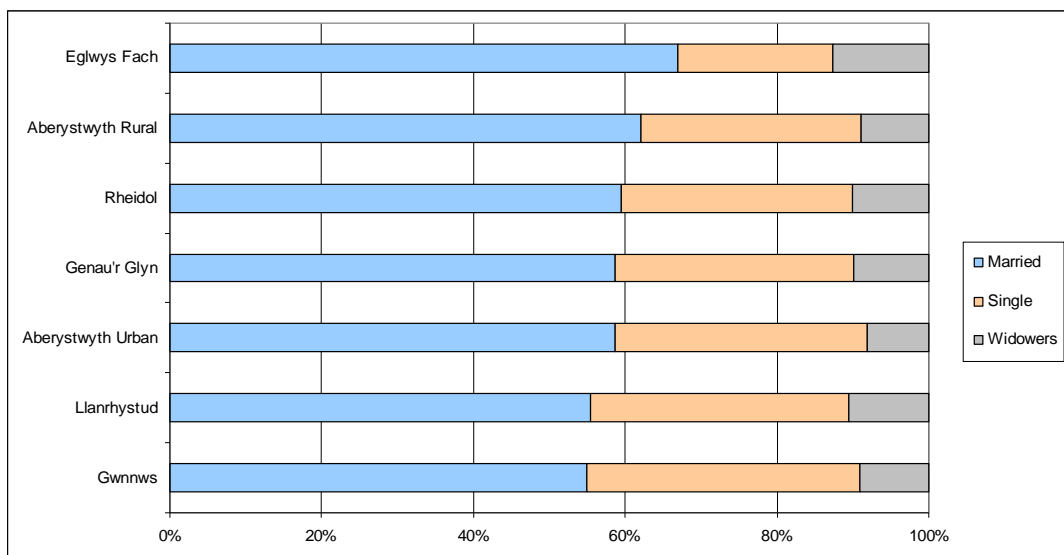


Figure 46 – Marital status of males aged 21 and over

married women across the study area. It is suggested that the numbers of female college students and private school pupils, and of domestic staff in hotels and boarding houses and attached to the households of middle-class and professional families may have been a factor behind these numbers.

Figure 46, above, is a stacked bar chart showing the relative proportions, as percentages, of single and married men and widowers in the localities analysed. Only for the relative proportions of widowers, from eight per cent to thirteen per cent, is there any kind of discernable pattern across localities; there are fewer widowers in Aberystwyth Town and its neighbouring parishes than in the more rural areas. The proportion of married men ranged from fifty-five to sixty-seven per cent with Aberystwyth Town at the lower end, and of single men from twenty per cent to thirty-six per cent. Unlike the evidence provided for women, there is no clear pattern for the variations in marital status of men across the study area.

5.6 Marital status and age – a note on statistical presentation

Using the sub-sets created from the core Excel database in order to study variations in marital status, as reported above in Figures 45 and 46, an attempt was made to see if the age profile varied in relation to marital status within each sub-district and for each gender. Figure 47, below, shows the numbers of married male and female subjects in the Llanrhystud sub-district, GRO reference RG12/4557. This chart shows a general increase in the numbers of married subjects from the age of twenty-one, reaching a peak at

around fifty to sixty years of age followed by a decline to the mid-eighties and late old-age. It is difficult to draw any firm conclusions from this chart but it would be impossible to see any kind of pattern if the data were presented

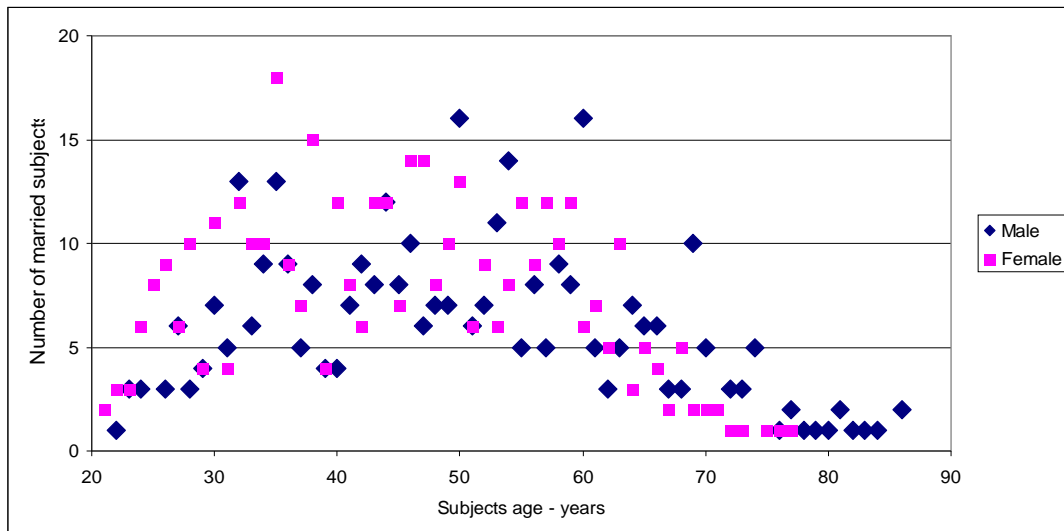


Figure 47 – Married subjects in Llanrhystud registration sub-district

only in tabular form. The arithmetic mean values of ages for subjects covered by this dataset were, respectively, forty-nine for men and forty-five for women. The arithmetic mean or average is an attempt to find a typical or representative value for each dataset. For most of the present study the derived and applied statistical measures are kept as simple as possible through recourse to derived percentages and arithmetic ratios with the results expressed, as far as practicable, in graphical and not tabular form. It is argued that this simple (but not simplistic) use of derived indicators and measures is a natural and logical benefit that stems from the 100 per cent sample of the source data. However, it is clear that care needs to be exercised in applying measures to some concepts. If simple averages or arithmetic means are applied to, for example, populations of different sizes

there are dangers that meaningful and robust answers and intelligent comparisons might not be obtained. That is the situation when looking at marital status and age for populations of markedly different sizes. Possible distortions can be minimised by using a weighted mean. A weighted average or weighted mean involves the assignment of different levels of importance or weights to the various components that are used to arrive at an answer. This compares with the practice of assigning a common mean value to each component with a population study. Using this measure the average age values for married subjects in Llanrhystud are forty-seven for men (down from forty-nine), and forty-five for women (unchanged from the unweighted value). This suggests that the underlying data are robust and that variance and error are not significant. It is claimed that this is a result of the 100 per cent sampling policy used for this project.

5.7 Conclusions

From this statistical study of the reported characteristics associated with the poor, the sick, the disabled, widows and widowers it is possible to draw some broad but limited conclusions. These tend to agree with those of other writers whose work is based rather more on qualitative or descriptive research. For example, it has been established that there was a statistically significant cluster of poor women in the Rheidol sub-district, an area suffering economic decline. This conclusion is based on the numbers of outdoor paupers found in each locality and does not take account of the indoor paupers accommodated

in the Union Workhouse. This assessment of the position of poor women confirms the view offered by Gerald Morgan (though he was not referring to Rheidol, as such):

‘ . . . women suffered severe economic injustice if they had no male partner, and since men died younger than women then as now, many women could expect to end their lives on the parish . . .’^{5.19}

Analysis of marital status and subject ages across the study area showed that, in addition to the highest number of female paupers, Rheidol had the highest proportion of widows. The ratio single:married women was lowest in rural areas, possibly reflecting more employment opportunities for unmarried women in Aberystwyth. The position for men was not as clear-cut.

5.19 Morgan, G 2006. *Ceredigion; a Wealth of History*. Llandysul: Gomer Press, 310. ISBN 1843235013

Chapter 6 - Analysis and discussion of personal names

6.1 Introduction

Because census enumerators' returns identify each subject by name they lend themselves to a study of personal names of all the individuals found in each community. Of course, for married women their recorded names are not necessarily the same as their birth surnames although there will be many examples of a Jones marrying a Jones or a Hughes marrying a Hughes – as in the present author's own family. It was not known to what extent, if at all, the incidence and distribution of surnames not normally associated with Ceredigion might provide an indication of inward movement of subjects. Similarly, it was not expected that the study would be able to show how preferences in naming children would change over time.

Studies on patterns and distributions of surnames in Wales have, primarily, been undertaken by genealogists and family history researchers. The most recent studies are by Sheila and John Rowlands, lately of Aberystwyth^{6.1}. There is some semi-quantitative work on spatial distribution of surnames for England, Scotland and Wales undertaken at University College, London,

6.1 Rowlands, S, 1993. The Surnames of Wales. *In*: J and S Rowlands, eds. *Welsh Family History: A guide to research*. Birmingham: Association of Family History Societies in Wales/Federation of Family History Societies, 57-72. ISBN 095207270X; Rowlands, J and S, 1996. *The Surnames of Wales*. Birmingham: Federation of Family History Societies (Publications). ISBN 1860060250; Rowlands, J, 1999. The Homes of Surnames in Wales. *In*: J and S Rowlands, eds. *Second Stages in Researching Welsh Ancestry*. Bury: Federation of Family History Societies (Publications)/Aberystwyth: University of Wales, 161-176. ISBN 18600600668

which is now available as a research tool on the National Trust website^{6.2}.

English surnames (as opposed to those found historically in Wales, Scotland and Ireland) may be characterised as falling into three broad groupings; the examples cited here all being found in the present study. They may be derived from personal characteristics (for example: Armstrong, Beard, Brown, Smart, White, etc), from occupation or status (for example: Baker, Mason, Smith, Weaver, etc) or from topographical features and locations (for example: Cottingham, Hill, Whittington, Wood, etc). Some names may give a firm indication that the family members are incomers to the area with links back to more distant origins. Culliford, Rowe and Tregoning imply connections with south-west England whilst Blackwell, Bonsall and Wheatley may have originated in Derbyshire; the common denominator here probably being incomers working in lead mining in Ceredigion. Carolan, Hogan and O'Brien are clearly Irish, with Abercrombie, Begbie and Paterson pointing to a Scots heritage. In the study area there is a scattering of continental European names such as Capaldi and Lepainleur.

This project analysed surnames and Christian names for those subjects included in the study. Many of these names are characteristic of the area, being attached to subjects born in the locality. Surnames or family names which were passed down in English society over generations may have emerged as constants as early as the eleventh century. Such hereditary names were not, however, universally prevalent prior to the Reformation in the sixteenth century in England. It is thought that the introduction of parish

6.2 <http://www.nationaltrustnames.org.uk/> [Accessed 7 Apr 2010]

registers in 1538 helped in stabilising the use of the same surname across a family group and over succeeding generations. The situation in Wales was quite different. The establishment of a stable family naming pattern is a relatively modern phenomenon. This is due to the system of patronymic naming where the personal name incorporates the name of a male ancestor, this usually being the father. In earlier times it was quite common for a subject's name to include several generations each connected by 'ap' or 'ab' (from *map* or *mab*, meaning 'son of', cf the Scots and Irish *mac*) to form a kind of oral pedigree. This attachment to genealogies was more than mere affectation. Giraldus Cambrensis recorded that^{6.3}:

' . . .The Welsh esteem noble birth and generous descent above all things, and are, therefore, more desirous of marrying into noble than rich families. Even the common people retain their genealogy, and can not only readily recount the names of their grandfathers and great-grandfathers, but even refer back to the sixth or seventh generation, or beyond them,'

An editorial footnote adds:

' . . .A man's pedigree was in reality his title deed, by which he claimed his birthright in his country. Everyone was obliged to show his descent through nine generations, in order to be acknowledged a free native, and by this right he claimed his portion of land in the community. . . .'

Modern Welsh surnames reflect this ancient style, although by 1891 names had become stable and established between succeeding generations. Sheila Rowlands^{6.4} suggests that fixed surnames were the norm long before the time of the present study in the late nineteenth century.

6.3 Wright, T, 1863. *The Historical Works of Giraldus Cambrensis*. London: Bohn, 505

6.4 Rowlands, S, 1993. The Surnames of Wales. *In*: J and S Rowlands, eds. *Welsh Family History: A guide to research*. Birmingham: Association of Family History Societies in Wales/Federation of Family History Societies, 61. ISBN 095207270X

The numbers of surnames derived from the names of saints and Old and New Testament subjects used as *Christian* names are dominant. It also explains why the variety in Welsh surnames is more restricted than those found in English families. Given that so many Welsh surnames are derived from Christian names it is, perhaps, surprising that the latter have been largely ignored in statistical studies.

The incidence of surnames derived from Hebrew names, such as Benjamin, Ishmael, and Samuel/s, for example, does not imply a Jewish connection. There is an example of a certain sensitivity around such names within the present author's own family. When Ann Elizabeth Williams of Llanbadarn Fawr married Emlyn Abraham, Chartered Auctioneer and Surveyor, at Bath Street Chapel, Aberystwyth on 11 March 1930, she decreed that, henceforth, they would be known as Mr & Mrs Abraham-Williams.

Of course, some Welsh surnames also derive from personal characteristics, for example, Gough (from *coch*), Lloyd and Wynn/e. Sheila Rowlands^{6.5} has extracted Cardiganshire surnames cited in marriage indexes for 1813 – 1837; see Appendix A. In her study, married women were recorded by the surname they held before the event. Here, names of Biblical and Christian origin and derived from English forms include Jones/Evans (from John), Davies, Thomas, Williams, and James. Names which are probably Welsh in origin are Morgan/s, Jenkin/s (Siencyn), Lewis (from Llewelyn) and Griffith/s. Interestingly, the list compiled by Sheila Rowlands does not include some commonly occurring Ceredigion surnames such as Edwards, Hughes, Lloyd

6.5 *ibid*, 68

(from *llwyd*), Owen, Roberts and Parry (from *ap Hari*). It is not practical to obtain pre-marriage names of women for events after 1837 as the local and national marriage registers are not open to public scrutiny. John and Sheila Rowlands^{6.6}, reported that the list of the ten most common names found across Wales in 1856 (see Appendix A) was compared with names listed in the four telephone directories that covered Wales in 1959. It was found that the ten names had exactly the same frequency and almost similar rankings.

6.2 Most common surnames

Appendix A also reproduces the listing^{6.7} setting out the ten most common surnames in England in 1856, covering five per cent of the population. Thus demonstrating that ninety-five per cent of the population had surnames outside the ten most common names. At the same time the ten most common names in Wales covered fifty-six per cent of the population, with forty-four per cent accounting for all the remaining names. Benjamin^{6.8} found a very similar proportion for Aberystwyth in 1871. His ten most common surnames covered fifty-four per cent of the population and include Edwards and Hughes which do not appear in Sheila Rowlands' 1813-37 rankings for Cardiganshire; being replaced there by James and Griffiths.

6.6 Rowlands, J and S, 1996. *The Surnames of Wales*. Birmingham: Federation of Family History Societies (Publications), 167. ISBN 1860060250

6.7 Rowlands, J, 1999. The Homes of Surnames in Wales. *In*: J and S Rowlands, eds. *Second Stages in Researching Welsh Ancestry*. Bury: Federation of Family History Societies (Publications)/Aberystwyth: University of Wales, 162. ISBN 18600600668

6.8 Benjamin, E A, 1986. *Footprints on the Sands of Time: Aberystwyth 1800 – 1880*. Carmarthen: Dyfed County Council, 125. ISBN 0860750159

The present study included nearly 24 000 subjects with a spread of some 850 names. Surnames such as Price/Pryce/Pryse and Lloyd/Loyd are counted as single entities. Clearly the process of submitting, recording and reporting of names can result in variations in spelling of the same name. It was found that the twenty most common surnames covered 18 600 subjects or seventy-eight per cent of the population. Nearly 15 000 subjects or sixty-two per cent of the total population were covered by the ten most common surnames; these ten surnames are ranked in Appendix A. In the interests of comparability and consistency this 'top ten' approach is carried forward into a more detailed study at enumeration sub-district level.

An analysis of the data on surnames was undertaken for all enumerated subjects in the study area across all the sub-districts. However detailed results are presented here only for Llanrhystud (RG12/4557), Aberystwyth Urban (RG12/4558) and Rheidol (RG12/4561) sub-districts, representing some sixty-three per cent of the population covered by the study. The results obtained for residents of Genau'r Glyn and Gwnnws sub-districts, for Aberystwyth Rural, and for the parish of Ysgubor-y-coed have been omitted only in order to avoid unnecessary repetition in this dissertation. This omission should not be seen as a violation of the 100 per cent sampling principle under-pinning this study.

6.2.1 Surnames in Llanrhystud registration sub-district

This sub-district, shown in Figure 9 above, which included the parishes of Llanilar, Llangwryfon, Llanrhystud, Llanddeiniol and Rhostie, had an aggregate population of some 2 700. The ten most common surnames covered some 2 000 or seventy-four per cent of the population of the sub-district with the rankings shown in Figure 48, below.

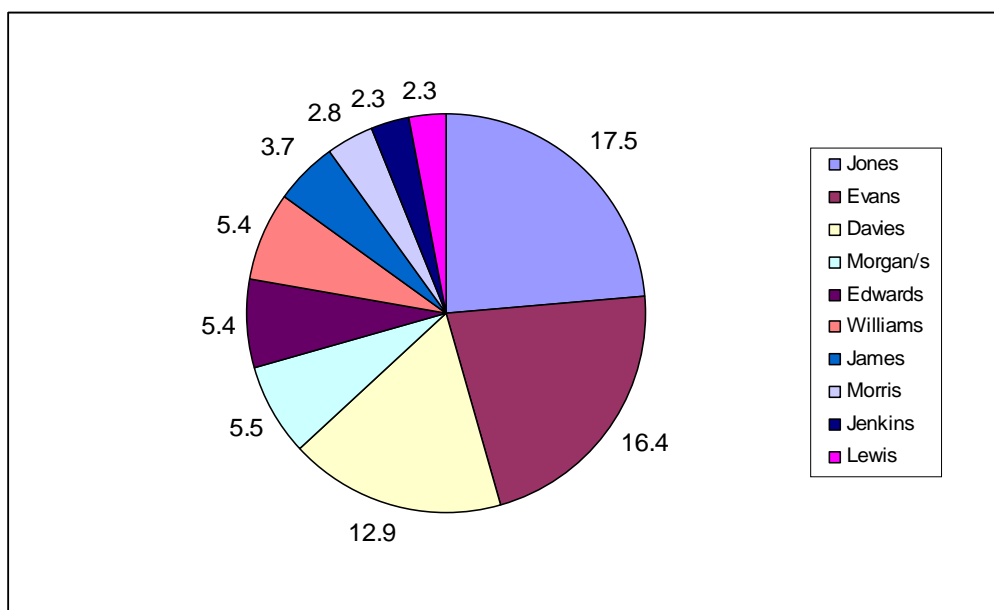


Figure 48 – Percentages of 'Top Ten' surnames across Llanrhystud registration sub-district

6.2.2 Surnames in Aberystwyth Urban registration sub-district

This sub-district covered the town and included the parishes of Holy Trinity and St Michael. The area had an aggregate population of some 6 600. The ten most common surnames accounted for some 3 200 or forty-nine per cent

of the population of the locality with the rankings for these names shown in Figure 49, below. Although this proportion was lower than the pattern across the study area it may be seen that Welsh surnames were still predominant. The highest ranked non-indigenous surname was White (which is most commonly found in central southern England, according to the National Trust website^{6.9}). There were forty subjects called White and they accounted for 0.6% of the population in Aberystwyth Town with the name being ranked at twenty-six out of some 600 surnames. White occurred more frequently than, for example, Meredith, Howells and Powell. From the Census of 1871, Benjamin^{6.10} calculated that the ten most commonly occurring surnames in urban Aberystwyth accounted for 3 600 subjects (fifty-four per cent) out of a

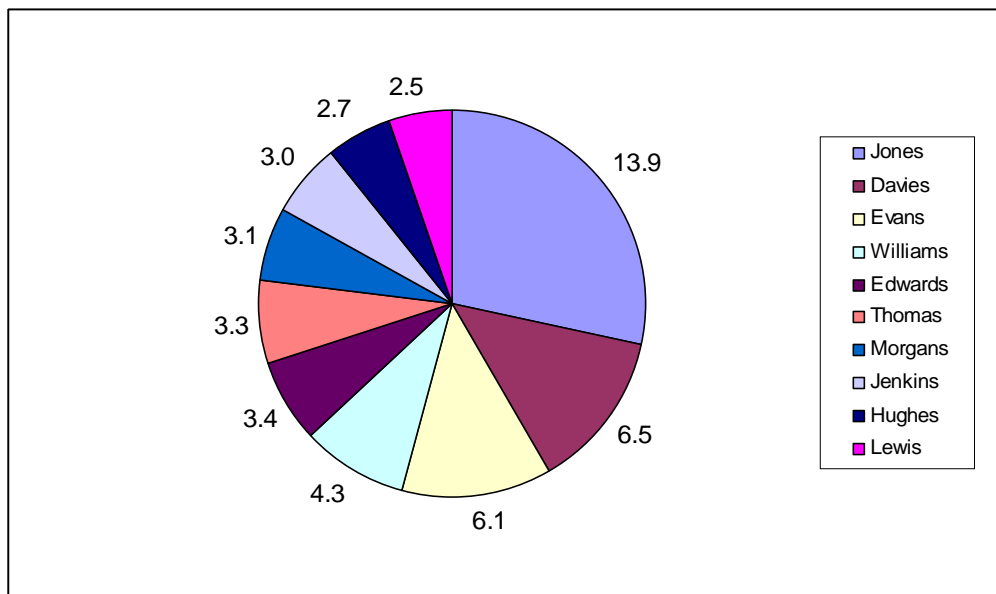


Figure 49 – Percentages of 'Top Ten' surnames across Aberystwyth Urban registration sub-district

6.9 <http://www.nationaltrustnames.org.uk/> [Accessed 13 Jul 2010]

6.10 Benjamin, E A, 1986. *Footprints on the Sands of Time: Aberystwyth 1800 – 1880*. Carmarthen: Dyfed County Council, 132-133. ISBN 0860750159

recorded population of some 7 000. His results are re-presented graphically in Figure 50, below.

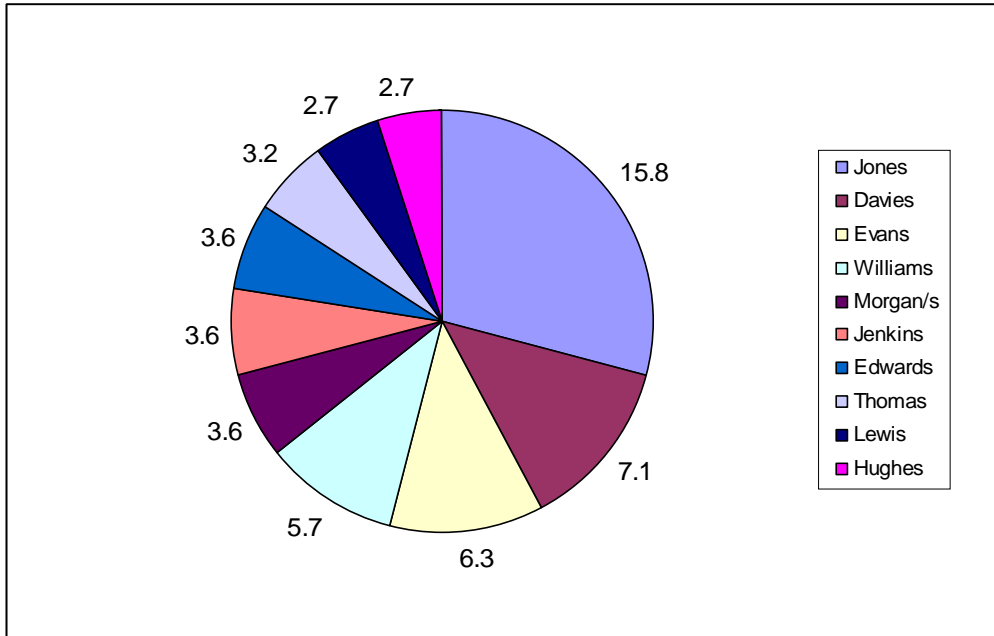


Figure 50 – Percentages of ‘Top Ten’ surnames in Aberystwyth Urban registration sub-district in 1871 – from Benjamin

6.2.3 Surnames in Rheidol registration sub-district

This sub-district included the parishes of Llanbadarn Fawr Uchaf, Llanfihangel-y-Creuddyn and Llanafan. The area had an aggregate population of some 5 300. The ten most common surnames accounted for some 3 400 or sixty-five per cent of the population of the locality with the rankings for these ten surnames shown in Figure 51, below.

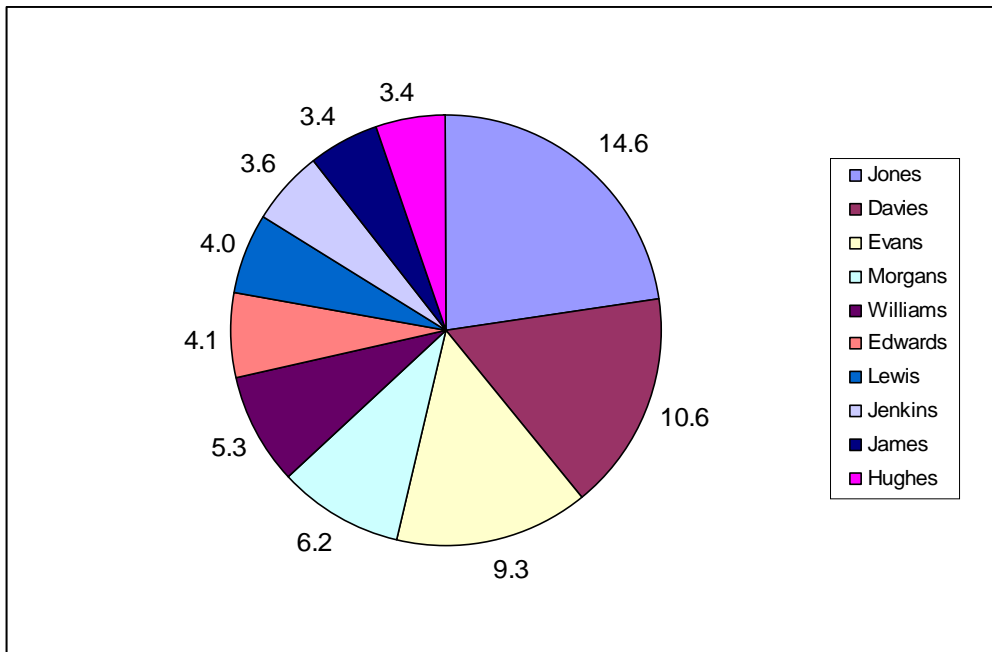


Figure 51 – Percentages of 'Top Ten' surnames across Rheidol registration sub-district

6.3 Overall pattern of surnames distribution

The relative proportions of the ten most commonly occurring surnames across the entire study area are shown, by enumeration sub-district (and the one parish), in Figure 52, below. Six of the localities studied returned values for the ten most common names of between sixty-three per cent and seventy-four per cent. Aberystwyth Urban returned forty-nine per cent suggesting there was a much wider spread of surnames to be found there together with a dilution of the proportion of indigenous Welsh names. It is suggested, therefore, that this measure of the most commonly occurring surnames, when set in the context of north Ceredigion society, provides a quantitative

indication of external influences on the indigenous population. It is not surprising that the most commonly occurring surnames in Aberystwyth Town covered a smaller proportion of the population compared to the rural areas which were less accessible and attractive to incomers. It is possible that the lower value for the urban area (at forty-nine per cent) is an indication of inward movements by permanent residents seeking to exploit new business opportunities or to retire, and by temporary residents such as students or tourists. There may also have been some degree of dilution of the ten most common names in the rural parishes (at sixty-three per cent) contiguous with Aberystwyth Urban, where incomers may have found attractive residences

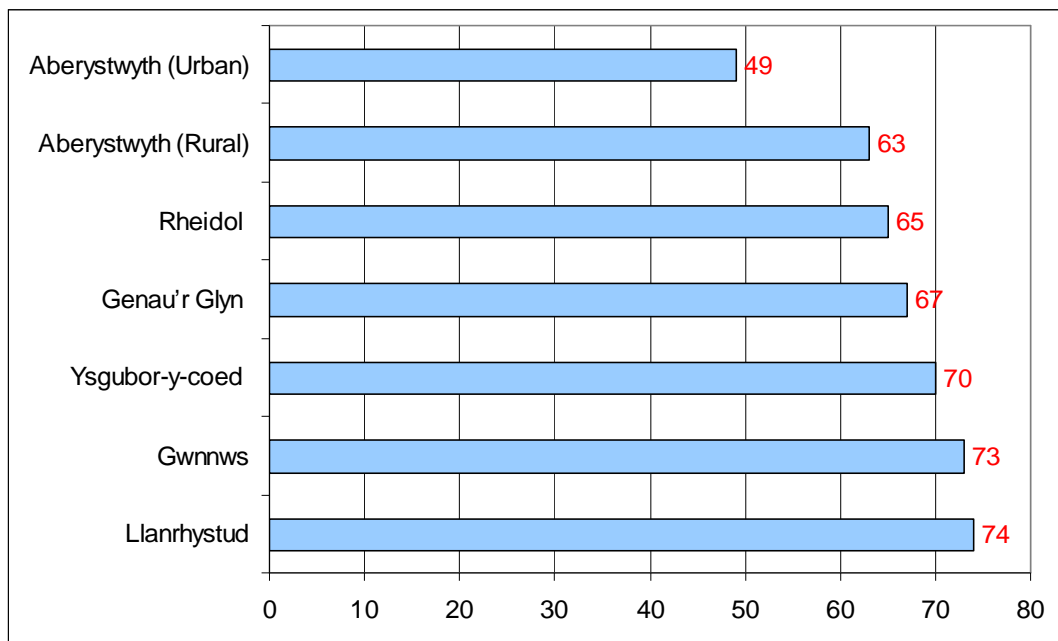


Figure 52 – Distribution, as percentage, of the ten most common surnames across the study area

outside the town, and in Rheidol (sixty-five per cent) where it is known that the lead mines attracted people from outside Wales. The manifestly rural and pastoral areas where the populations were rather more settled, such as

Llanrhystud (seventy-four per cent) showed the lowest level of dilution with the fewest subjects having surnames outside the ten most common.

The measures derived and reported in this chapter do not recognise changes in the surnames of married women. At the same time these results cannot take account of the place of birth of subjects who may have been born within Aberystwyth registration district to families where the fathers, and possibly the mothers, were incomers and not part of the historic, indigenous population. If it can be accepted that surnames can be regarded as a manifestation of family continuity the overall results show that the urban population almost certainly had a different cultural heritage compared with the rural hinterland. It is suggested that the aggregate proportion of the derived 'top ten' surnames, as displayed in Appendix A act as an indirect benchmark showing the extent to which the indigenous population has been changed by inward migration. This change was probably related to emerging developments in communications, in economic activity and the development of new institutions.

Just three surnames, Jones (seventeen per cent), Davies (nine per cent) and Evans (nine per cent) accounted for more than 8 000 subjects across the study area; representing thirty-four per cent of the total in 1891.

6.4 Background to Christian names study

The study of naming patterns for Victorian Christian names has received less attention than that given to surnames. The patronymic connection between

surnames and Christian names in Welsh society has been briefly explained and compared with patterns found contemporaneously in England. Although the evolution and distribution of Welsh surnames has been studied and analysed, including the development and application of a quantitative model by John and Sheila Rowlands^{6.11}, little attention has been paid to the study of Christian names. They cite examples of surnames derived from Biblical and other Christian names or forenames listing fifty five Old Testament names



Figure 53 – A current example of an Old Testament forename (Hebrew –Binyāmîn) transformed into a Ceredigion surname

from Abraham to Joel to Samuel^{6.12}. Most of these can be found as surnames

6.11 Rowlands, J and S, 1996. *The Surnames of Wales*. Birmingham: Federation of Family History Societies (Publications), 14. ISBN 1860060250

6.12 *ibid*, 207

among the population of the study area in 1891.

Anderson^{6.13} refers only briefly to patterns of Christian naming and without reference to any local or regional context. Benjamin has reported on principal Christian names in Aberystwyth in the 1871 Census^{6.14}, thus:

Males

- 1 John
- 2 David
- 3 Thomas
- 4 William
- 5 Richard
- 6 Evan

Females

- 1 Mary
- 2 Anne/Ann/Anna
- 3 Elizabeth
- 4 Margaret/ta
- 5 Jane
- 6 Catherine

No information is given on the actual or relative values behind these rankings.

Many common Welsh surnames are also derived from Christian names of Norman origin, such as Williams, Edwards, Hughes and Roberts.

The main difference between given Christian names and inherited surnames, derived from Biblical, medieval Norman and other forenames, is the discretion permitted on the part of the parents in naming the child. That freedom was, however, historically constrained by traditional practices within families. There were often rigid styles of naming where children were named after grandparents, a firstborn son being named after his paternal grandfather, a second son being named after his maternal grandfather, and so on. This rigidity goes some way to explain why so many subjects have names such as Evan Evans, William Williams, and, of course, the ubiquitous John Jones.

And there is Nelson Nelson, farmer, age 42, of Ceulan-a-Maesmor.

6.13 Anderson, M, 1972a. The study of family structure. In: Wrigley, E A, ed. *Nineteenth-century society: Essays in the use of quantitative methods for the study of social data*. Cambridge: Cambridge University Press, chapter 2, 72. ISBN 0521084121

6.14 Benjamin, E A, 1986. *Footprints on the Sands of Time: Aberystwyth 1800 – 1880*. Carmarthen: Dyfed County Council, 125. ISBN 0860750159

It is recognised that choice of Christian names can be used as an indication of changes in fashion, taste and culture. For some years a correspondent has annually monitored and routinely reported on names chosen by parents announcing births in *The Times*. The Office of National Statistics has reported on the 100 most popular names for boys^{6.15} and for girls^{6.16} in England and Wales in 2009. These listings include Lewis (at twenty-one), Owen and Rhys (at forty-seven and fifty-nine, respectively) and Megan (at twenty).

Low^{6.17} has reviewed a study by Ancestry.co.uk, the online genealogy research provider, into naming patterns from 1837 to 2005. That study was based on 318 million births, marriages and deaths records for England and Wales. The most popular male names were John, William and Thomas; the most popular female names were Elizabeth, Mary and Mary Ann. The present study suggests that the inhabitants of north Ceredigion were not serious followers of fashion in the latter part of the nineteenth century. There were only twenty-nine subjects whose first name was Albert and just six who were called Victoria.

6.5 Analysis of Christian names across the study area

The present study uses the approach developed for surnames and applies it to Christian names. It is probable that, in this second exercise, the results are

6.15 http://www.statistics.gov.uk/downloads/theme_population/2009-boys.xls [Accessed 23 Jan 2011]

6.16 http://www.statistics.gov.uk/downloads/theme_population/2009-girls.xls [Accessed 23 Jan 2011]

6.17 Low, V, 2020. How royals give lead in naming our little princes and princesses. *The Times*, 17 Feb 2010, 27a-f

less precise because reported Christian names are likely to be more ambiguous than surnames. It would appear that enumerators may have, in some cases, been imprecise over the forms and spellings of some Christian names. For example, there is a suspicion that some entries for Margareta are where the subject may have been baptised Margaret. Where names such as Lizzie or Tom have been encountered it is not possible to know if these are pet or formal, given names. Where initials only have been reported efforts have been made to find the underlying names in full by reference to published registers of births indexes. In cases where an initial is followed by a full name, for example D John (followed by surname), that entry has been ignored. Due to a general lack of consistency in the reported data no attempt has been made to analyse and interpret second and subsequent Christian names.

The ten most common names have been calculated and reported as an aggregate value, for males and then for females, for the entire study area. With the perceived lack of precision in many reported Christian names the individual results for each locality have not been calculated. It is not the intention to give a false impression of precision and robustness where the calculations do not support that level of confidence. This 'fuzziness' within the source data may be why Benjamin did not report actual values in his study.

6.6 Male Christian names

Some 8 000 men and boys out of the base male population of nearly 11 000 subjects had the ten most common Christian names; see Figure 54, below.

Just three names, John (twenty per cent), David (thirteen per cent) and William (eleven per cent) accounted for forty-four per cent of the entire population.

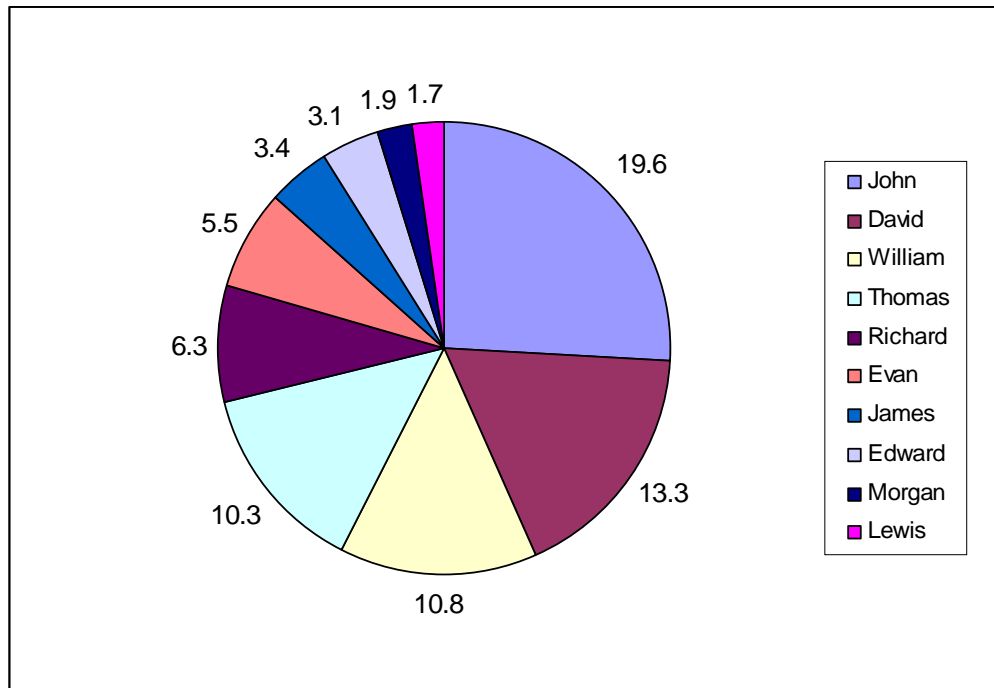


Figure 54 – ‘Top ten’ male Christian names - percentage share across the study area

6.7 Female Christian names

Over 10 000 women and girls out of the base population of 13 300 female subjects had the ten most common Christian names; see Figure 55, below. Four names, Mary (twenty per cent), Elizabeth (twelve per cent), Margaret/Margaretta (twelve per cent) and Ann/Anne/Annie (twelve per cent) accounted for fifty-six per cent of the entire population.

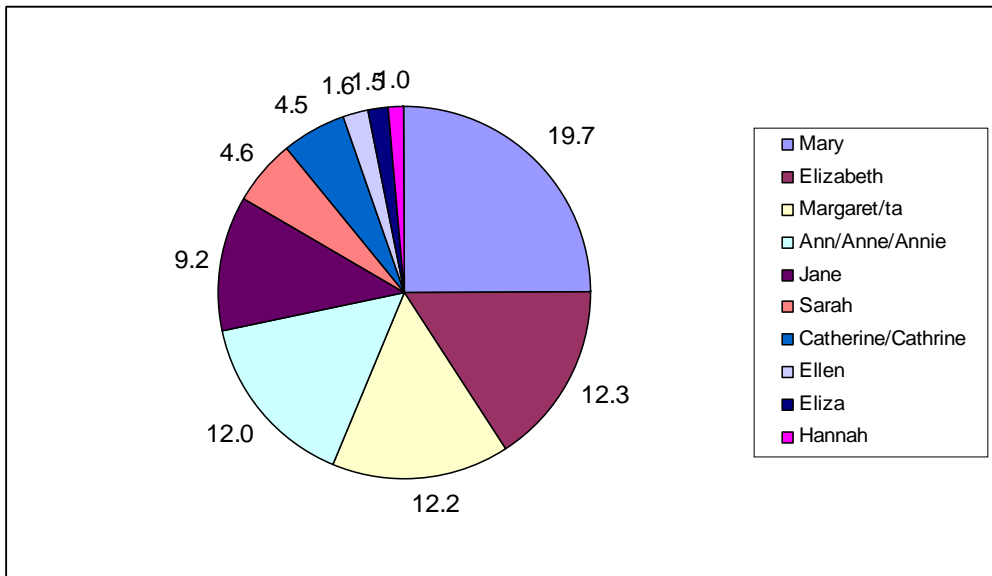


Figure 55 - 'Top ten' female Christian names - percentage share across the study area

6.8 Conclusions

This part of the study attempts an analysis of personal names and naming patterns in relation to other more substantial and expert work on surnames. Variations in the occurrence of the most common surnames between different parts of the study area are used as indicators of different levels of inward migration, especially from England. The work on Christian names reported here has more originality. The data presented show that the range of Christian names found in north Ceredigion in the late Victorian era was exceptionally limited. This may reflect conservative family and cultural traditions obtaining at the time covered by the study. Characteristically Welsh male Christian names such as Evan, Morgan and Lewis were fairly common

but there were no occurrences of uniquely Welsh names such as Elwyn, Emrys, and Gareth; which probably did not appear (or re-appear) until the twentieth century. For females none of the 'top ten' Christian names had a recognisably Welsh connection whilst examples such as Betsan, Mair and Siân were just not to be found. There has to be a suspicion that parents who were tempted to give their children names outside the confined choice dictated by family and social conventions would have been accused of having inappropriate airs and graces. It is difficult to make comparisons with Christian naming patterns observed in the study area and those found in other communities due to the lack of reported surveys.

Chapter 7 - A study of the language question

7.1 Introduction

This chapter presents a detailed analysis of reported language ability. The 1891 census was, for Welsh returns, the first where a question on language competence was included. There has been much discussion on the reasons for including this question in the census forms distributed to households. There was debate and criticism voiced by interested parties in the months leading up to the census of April 1891. Some of that background is summarised here; it is not the intention to critically review those discussions at a detailed level. The nature of the gathering of the original information, its subsequent analysis and reporting, the reliability of those data and the various interpretations that were placed on the results have been the subject of debate and discussion for nearly 120 years. The matter of Welsh language competence was, and still is, one that raises nationalistic, political and cultural issues that have no parallel in debates concerning the late Victorian and early twentieth century censuses in as far as they relate to *other* parts of the United Kingdom. The census returns contain and convey information that is volunteered by representatives of each household or residential institution. Why has it been suggested that the providers of answers to the question on Welsh language ability were untruthful or deceitful whilst those same informants were perceived as models of unquestionable honesty and propriety on questions about age or relationships? The veracity of the latter has not been subjected to the same level of scrutiny or questioning that has

been devoted to the language question. The methodology used in the present study is based on a key definition of language ability that aims to distinguish this work from other studies.

7.2 Background to the language question

The reasons behind the inclusion of a language question, for the first time, in the 1891 census have been comprehensively reviewed and analysed in terms of an awakening of nationalistic awareness by G H Jenkins^{7.1}, and by Dot Jones^{7.2}. Kenneth Morgan describes a 'kind of national renaissance' which manifested itself in a number of ways^{7.3}. He sets this awakening of national consciousness and self-awareness in a wider European context embracing political pressures for change along with cultural assertiveness. He writes that this awareness of differences in history and national identity 'inevitably seeped through, even to geographically and culturally isolated Wales'. In a more localised context, when writing about the area bordering on Cardigan Bay, Watson^{7.4} refers to the area as being 'isolated from the east by the Heartland' and 'a stronghold of the Welsh language and culture'. In his recently published cultural history of Ceredigion Benbough-Jackson writes of

7.1 Jenkins, G H, 1999. The Historical Background to the 1891 Census. *In*: Parry, G and Williams, M A, eds. *The Welsh Language and the 1891 Census*. Cardiff: University of Wales Press, chapter 1, 1-30. ISBN 0708315364

7.2 Jones, D, 1998. *Statistical evidence relating to the Welsh language 1801-1911. Tystiolaeth Ystadegol yn ymwneud â'r iaith Gymraeg 1801-1911*. Cardiff: University of Wales Press, 211-214. ISBN 0708314600

7.3 Morgan, K O, 1982. *Rebirth of a Nation: WALES 1880-1980*. Oxford: Oxford University Press, 94-95. ISBN 0198217609

7.4 Watson, E, 1965. The West Coast Region. *In*: Bowen, E G, ed. *Wales: A Physical, Historical and Regional Geography*. London: Methuen, 305.

the physical isolation of the county which, whilst it may appear to be looking westwards, faces east in terms of its commercial interests^{7.5}.

Gruffudd^{7.6}, referring to the works of H J Fleure (1877-1969) and Iorwerth Peate (1901-1982), considers the relationship between geographical barriers and cultural and social continuity. Neil Evans, when presenting an historical analysis of cultural differences between country and town refers to ideas promoted by E G Bowen^{7.7}:

‘ . . . who explained the history of Wales as a conflict between inner Wales (the mountainous core, which conserved the folk culture) and outer Wales (the borderlands and coastal plains open to influences from outside). . . ‘

Geraint Jenkins shows how the inclusion, for the first time, of the Welsh language question in the 1891 census was a reflection of contemporary political and cultural developments that had also started to question the *status quo* in respect of the position of the Anglican Church, and the ownership of land. Dot Jones explains how, in the years before 1891, London-based officialdom commonly regarded Wales as being part of England, almost with the status of a county, whilst according Ireland and Scotland a higher level of recognition. It is also clear that there were opposing forces at work at this time. The Welsh language was under threat from the 1870 Education Act which encouraged the use of English in primary education, from increased mobility facilitated by the development of the rail network, from inward and

7.5 Benbough-Jackson, M, 2011. *Cardiganshire and the Cardi, c 1760 – c 2000. Locating a place and its people*. Cardiff: University of Wales Press, 12. ISBN 9780708323946

7.6 Gruffudd, P, 2000. The Welsh Language and the Geographical Imagination 1918-1950. In: Jenkins, G H and Williams, M A, eds. *Let's do our best for the ancient tongue'. The Welsh Language in the Twentieth Century*. Cardiff: University of Wales Press, 112-113. ISBN 0708316581

7.7 Evans, N, 2005. Rethinking urban Wales. *Urban History*, 32, (1), 122

outward migration, and from media influences^{7.8}. It has been suggested, however, that the information collected and reported for this initial language survey is not reliable and should be treated with caution^{7.9}. Higgs suggests that the information in the returns was biased towards claims of an ability to speak Welsh. On the other hand, Brinley Thomas points out that in some Anglicised areas of the Principality Welsh speakers may have been reluctant to give a positive answer to the language question on the census return. He suggests they may have been 'ashamed' to acknowledge their fluency with the language^{7.10}. Kenneth Morgan has also suggested that the proportion of Welsh speakers determined from the 1891 census may have been underestimated^{7.11}. In a study of two small, unidentified, communities in north and in south Wales in the mid twentieth century, Frankenberg^{7.12} has described how language differences, together with religious affiliations, were associated with social divisions, sometimes leading to open antagonism and hostilities, particularly in respect of educational provision. It is suggested, that in some spheres at least, attitudes shown by and towards Welsh speakers and non-Welsh speakers had changed little between 1891 and 1957.

7.8 Davies, R, 1998. Language and Community in South-West Wales c. 1800-1914. *In*: Jenkins, G H, ed. *Language and Community in the Nineteenth Century*. Cardiff: University of Wales Press, 116-117. ISBN 0708314678

7.9 Higgs, E, 1991. *Making Sense of the Census*. London: HMSO, 76-77. ISBN 0114402191

7.10 Thomas, B, 1986. The Industrial Revolution and the Welsh Language. *In*: Baber, C and Williams, L J. *Modern South Wales: Essays in Economic History*. Cardiff: University of Wales Press, 18-19. ISBN 0708309437

7.11 Morgan, K O, 1982. *Rebirth of a Nation: Wales 1880-1980*. Oxford: Oxford University Press, 95. ISBN 0198217609

7.12 Frankenberg, R, 1969. British Community Studies. Problems of Synthesis. *In*: Banton, M, ed. *The Social Anthropology of Complex Societies*. London: Tavistock Publications, 136-142. ISBN 422714003

Geraint Jenkins describes how, in the lead-up to census day, proponents of Welsh nationalism, such as Thomas Gee, Beriah Gwynfe Evans and David Lloyd George used their influence to urge householders to give serious attention to the language question^{7.13}. After the census had been completed, and again, when the official summary reports were published in 1893 the same lobbyists complained that the process had not been competently managed, calling the results into question. When considering the language question and its treatment in the 1891 census it is important to maintain a sense of proportion. In the opinion of the present writer this matter has generated much pointless discussion. The protagonists and parties to this debate appear to have lost sight of an obvious truth. That is, census returns, are not scientific statements of fact. The information provided is often ambiguous, incorrect, and lends itself to misinterpretation and misrepresentation even by the most assiduous and objective observers and commentators. In this matter of language, objectivity is often lacking.

The first serious attempt at analysis of the 1891 language returns was undertaken by the Centre for Advanced Welsh and Celtic Studies (CAWCS). The CAWCS project reviewed the political and cultural climate obtaining at the time and showed that there was a great deal of controversy surrounding the issue. The study highlighted the claims and counter-claims made by the various parties and suggested that a range of motives and agendas, including those of vested interests, characterised the debate. Conspiracy theorists

7.13 Jenkins, G H, 1999. The Historical Background to the 1891 Census. *In*: Parry, G and Williams, M A, eds. *The Welsh Language and the 1891 Census*. Cardiff: University of Wales Press, chapter 1, 2-12. ISBN 0708315364

appeared to have had a field day. In the introductory chapter to the CAWCS report, Geraint Jenkins states^{7.14}:

‘ . . . Inevitably, all censuses are subject to error and ambiguity, and the 1891 census is no exception . . . ’

Higgs is more forthright^{7.15}:

‘ . . . The results obtained by means of these questions do not appear to have been very trustworthy. Since there was no standard laid down as to the degree of proficiency required in speaking English, people in certain districts believed that if they spoke Welsh preferentially or habitually, and only spoke English occasionally or poorly, they were justified in returning themselves as speaking Welsh only . . . ’

Then, referring to alleged political and nationalist influences, he concedes:

‘ . . . the usual confusion on the part of householders as to the exact information required was probably a more potent source of error. . . ’

The reality is that the question on language capability was more likely to have been a victim of subjective interpretations and was harder to answer correctly than, say, the requirement for a subject to give their correct surname. That argument, however, cannot be used to explain the many entries made for infants when there was no reasonable expectation that they could speak either Welsh or English.

7.3 Previous studies on the 1891 language question

Geraint Jenkins has described the mechanisms for conduct of the 1891 census in relation to the inclusion of the Welsh language question, describing

7.14 *ibid*, 14

7.15 Higgs, E, 1989. *Making sense of the Census. The Manuscript Returns for England and Wales, 1801-1901*. London: HMSO, 77

the CAWCS study; a first attempt at analyzing reported language ability^{7.16},
^{7.17}. The CAWCS project used an approximately 5 per cent sample - around
100 000 subjects located in twenty defined study areas. It may be noted that
this 5 per cent sample was not statistically representative of the national
population as Anglicised communities in, for example, Radnorshire were
excluded. No detailed information is given on the computer-based
methodology used to carry out detailed investigations into the selected study
areas. The Jenkins contribution discusses the background and abuses of the
census in detail and, in this respect, is most helpful. There are many cited
examples showing how the answers to the language question need to be
treated with care^{7.18}. The CAWCS study included one community covered by
the present work and that locality, Aberystwyth, is further considered in due
course^{7.19}.

In a study of the growth and development of Llandudno as a fashionable
watering-place where the principal catalyst was the coming of the railway,
Gwenfair Parry^{7.20} has considered the impact of Anglicising pressures on the
indigenous Welsh language culture. The 1891 census returns were used to
measure the distribution of spoken languages across the town and to survey

7.16 Jenkins, G H, 1999. The Historical Background to the 1891 Census. *In*: Parry, G and Williams, M A, eds. *The Welsh Language and the 1891 Census*. Cardiff: University of Wales Press, chapter 1, 1-30. ISBN 0708315364

7.17 Jenkins (*ibid*, 4) cites Miss Elizabeth Freeman of Dowlais as being a rare ("only one") example of a female enumerator. Nearer to home there was Elizabeth Morgan who was responsible for Rheidol sub-district, District No 1 – Cwmrheidol (Part of), reference RG12/4561 f1 p1. Another case of the use of a small, atypical, example to draw an incorrect generalized conclusion.

7.18 *ibid*, 2-13

7.19 Smith, R, 1999. Aberystwyth (Cardiganshire). *In*: Parry, G and Williams, M A, eds. *The Welsh Language and the 1891 Census*. Cardiff: University of Wales Press, chapter 12. ISBN 0708315364

7.20 Parry, G, 2002. 'Queen of the Welsh Resorts': Tourism and the Welsh Language in Llandudno in the Nineteenth Century. *Welsh History Review*, 21, (1), 118-148

the relationship between language ability and county of birth. It is not stated what model or system was used to provide the tabulated values produced in the survey. Following the completion of the railway the town developed as a fashionable holiday resort which, in turn, led to an influx of permanent residents from north-west England and the Midlands. By 1891 just thirteen per cent of residents of the town spoke Welsh only, compared to sixty-six per cent across Caernarfonshire^{7.21}.

Smith^{7.22} has presented a detailed examination of Welsh language ability for residents of Aberystwyth town based on a study which used quantitative analysis to examine the relationships between reported language ability and age, gender, occupation and place of birth. This contribution is further considered later in this chapter. A large part of the Smith study is concerned with the structure of households and the part played within households and by parents in influencing the languages spoken by children. Households have not been recorded and analysed in the present study.

Drake^{7.23} has discussed possible defects inherent in the gathering of census data, citing instances of under-reporting of occupants of households, distortion of recorded Welsh speakers in 1891, and errors with the ages of subjects either through confusion or a desire to mislead. He makes that point that the success of the exercise was (and still is) as much dependent on public goodwill as on the efficiency of the enumerators.

7.21 *ibid*, 135

7.22 Smith, R, 1999. Aberystwyth (Cardiganshire). *In*: Parry, G and Williams, M A, eds. *The Welsh Language and the 1891 Census*. Cardiff: University of Wales Press, chapter 12, 255-277. ISBN 0708315364

7.23 Drake, M, 1972. The census, 1801 - 1891. *In*: Wrigley, E A, ed. *Nineteenth-century society. Essays in the use of quantitative methods for the study of social data*. Cambridge: Cambridge University Press, chapter 1, 7 – 46. ISBN 0521084121

Henderson^{7.24} has conducted a study of linguistic characteristics of north Cardiganshire in the context of Anglicising influences and the effects of advances in communications. The geographical area chosen by Henderson is virtually identical to that in the present study - the region between the natural barriers of the Cambrian Mountains in the east and Cardigan Bay in the west, bounded by the Dyfi Estuary in the north, the Ystwyth Valley in the south-east and the Wyre Valley in the south-west. Henderson describes the eastern portion as mainly upland pierced by deep valleys such as the Leri, Rheidol and Ystwyth and the south-western portion as the northern-most extension of the Cardiganshire coastal plain and lowlands. The land is almost entirely rural with the exception of the coastal town of Aberystwyth. Two sample areas, one urban and one rural were selected as the basis for the study. Henderson argued that a population base of some 21 000 was too large for the practical interpretation of the statistics and so a ten per cent sample was used. The first sample area selected by Henderson was the North Aberystwyth census ward with 1 194 subjects and the second the mid-Ystwyth Valley (Llanafan, Llanilar and Rhostie) with a population of 1 226^{7.25}. Hence, this was not a statistically random sample across the entire study area and although the area nominally chosen by Henderson for his research is superficially similar to that in the present survey that is not, in truth, the reality. The title and original premise of his study is somewhat diluted by his methodology. Henderson has reviewed the development of education with particular reference to the

7.24 Henderson, E D J, 2000. *Linguistic Homogenisation in the Periphery: The Case of North Cardiganshire*. Thesis (MPhil) University of Wales, Aberystwyth
7.25 *ibid*, 57

provision of Welsh language teaching. The arrangements for the language ability column in the 1891 census returns are discussed^{7.26} and weaknesses in collecting and reporting the householders' responses highlighted. Despite the various shortcomings it was recognised that the 1891 census remained the best dataset for the Welsh language in the late nineteenth century^{7.27}.

In north Cardiganshire there was significant inward migration both by seasonal tourism in Aberystwyth and by permanent residents from England. Outward migration only served to exacerbate the impact of in-migration of non-Welsh speakers. Henderson presents a series of pie charts showing the place of birth for residents of, and the linguistic make-up of, the two study areas. Welsh was, by far, the dominant language of the mid-Ystwyth Valley compared with Aberystwyth where the majority could speak English^{7.28}. Henderson was able to show that there were great differences between the linguistic compositions of the different birthplace categories and that place of birth was a significant factor in determining the language of an individual^{7.29}. Of those born within the study areas, who are referred to as 'indigenous', then the indigenous populations of the two areas are overwhelmingly Welsh-speaking. In Aberystwyth fifty-seven per cent were Welsh-speaking with in-migration directly influencing the proportion of Welsh speakers but in rural mid-Ystwyth virtually no linguistic influences from outsiders were found and ninety-one per cent of the population was Welsh-speaking. The significant in-migration of English speakers into urban Aberystwyth simply magnified an

7.26 *ibid*, 116-117

7.27 *ibid*, 118

7.28 *ibid*, 120

7.29 *ibid*, 126

existing situation within that indigenous population.

Henderson considered a possible relationship between (low) socio-economic status and language. The best guide to socio-economic status was thought to be occupation. Here there was a problem with the census data as considerable numbers of residents in both study areas were shown as having no occupation. It was not suggested that the data were inaccurate but that in apparently omitting a large proportion of the population the credibility of the remaining information as a valid and robust representation of the whole population might have been compromised. Housewives may have constituted a considerable proportion of those reported as having no occupation^{7.30}.

Henderson reported problems with arranging occupations into different strata. He used the system proposed by Armstrong^{7.31} with occupations classified in five groups. The subjects in the two study areas were classified by occupational group and language ability with the results reported in tabular form. The study showed that English language ability was a path to higher socio-economic status. However, Henderson established that a total abandonment of Welsh by those at the top of the socio-economic scale was not the case. It appeared that knowledge of both languages was perceived to be an advantage for those with higher socio-economic status. Henderson has suggested that such individuals were part of two different worlds; an all-powerful World power and Empire that spoke English, and a fringe Celtic

7.30 *ibid*, 129-130

7.31 Armstrong, W A, 1972. The use of information about occupation. *In*: Wrigley, E A, ed. *Nineteenth-century society. Essays in the use of quantitative methods for the study of social data*. Cambridge: Cambridge University Press, chapter 6, 191 – 310. ISBN 0521084121

region that spoke mainly Welsh^{7.32}.

Henderson investigated language shift, a process that occurs when speakers of one language change to another language over the course of several generations. Results for both study areas are presented, in tabular form, showing language ability by age group. Interestingly Henderson found that of those who were of non-Welsh-speaking origins the Cornish displayed the greatest enthusiasm to acquire a knowledge of Welsh^{7.33}. It is, perhaps rather too fanciful to suggest that there was some instinctive ability that led these incomers from a former Celtic language region to adopt the sister culture of their adopted homeland^{7.34}? It is probable that there were more pragmatic reasons linked to the language used by fellow lead miners and by their neighbours within their adopted communities.

7.4 Interpretation of the raw data

Column 17 of the transcribed census return (Appendix B) is headed 'Languages Spoken' where householders were required to enter 'Welsh', 'English' or 'Both'. Dot Jones makes a perfectly valid point about the official summary report concerning the Welsh language question where the results were presented only as a one-page summary table, published in 1893^{7.35}.

7.32 Henderson, E D J, 2000. *Linguistic Homogenisation in the Periphery: The Case of North Cardiganshire*. Thesis (MPhil) University of Wales, Aberystwyth, 137-138

7.33 *ibid*, 145

7.34 Jenkins, G H, ed, 1998. *Language and Community in the Nineteenth Century*. Cardiff: University of Wales Press, 15. ISBN 0708314678

7.35 Jones, D, 1998. *Statistical evidence relating to the Welsh language 1801-1911. Tystiolaeth Ystadegol yn ymwneud â'r iaith Gymraeg 1801-1911*. Cardiff: University of Wales Press, 215. ISBN 0708314600

This represented the total population aged two years and over but only at registration county and registration district levels. There was no attempt to categorize the data by age, gender or locality.

The reported national values were (and these included Monmouthshire)^{7.36}:

Population over 2 years of age	- 1685614
Welsh only	- 508036
Both	- 402253
English only	- 759416

The CAWCS study used quantitative analysis to examine the relationships between reported Welsh language ability and age, gender, occupation and place of birth. The aims of the study^{7.37} were to capture Welsh language data in the 1891 Census returns and to create computer datasets encompassing name, address, age, relationship, occupation, place of birth and language capability for the complete populations of twenty selected study areas across Wales. The datasets were then used to analyse language capability in terms of age, gender, occupation and place of birth, and to produce a classification for occupations and correlate language with economic activity. An over-riding objective was to increase understanding of a period in time when Welsh language ability was a major factor in the life of the nation.

The CAWCS study involved the selection of twenty communities across Wales for detailed analysis. One of these areas was Aberystwyth, chosen as representative of a 'tourist and commercial town'. The Aberystwyth study, by

7.36 *ibid*, 225

7.37 Jenkins, G H, 1999. The Historical Background to the 1891 Census. *In*: Parry, G and Williams, M A., eds. *The Welsh Language and the 1891 Census*. Cardiff: University of Wales Press, 14-15. ISBN 0708315364

Robert Smith, presents a tabular summary (his Table 1^{7.38}, below) setting out the language and population numbers for Aberystwyth, Aberystwyth registration district and Cardiganshire. The population of Cardiganshire is given as 82 714 (plus 265 *other* individuals) which excludes subjects aged less than 2 years. Quite clearly this value refers to the registration county, taken from the Census Report for 1891^{7.39}. The pitfalls resulting from the use of numbers derived from summary reports for registration counties rather than verifiable primary sources have been discussed in part 1.3, above.

Smith – Table 1 (extract):

	Welsh	Both	English	Total
Aberystwyth	1 751	3 482	1 402	6 635
Aberystwyth R D	11 971	6 136	2 169	20 276
Cardiganshire	61 624	17 111	3 979	82 714

Smith does not reference the sources of the values quoted here or explain that they were, apparently, not produced as part of the CAWCS data capture exercise. He gives the population of Aberystwyth (2 years and over) as 6 635 plus 45 *others*. The Census Report for 1891 gives a total population for Aberystwyth Borough of 6 725^{7.40}. Presumably this figure covers *all* subjects, including those under 2 years of age? Kelly, states that^{7.41}:

‘... the population in 1891 was 6 725. The population of Holy Trinity ecclesiastical parish in 1891 was 2 306; and of St Michael, 4 419’.

7.38 Smith, R, 1999. Aberystwyth (Cardiganshire). In: Parry, G and Williams, M A, eds. *The Welsh Language and the 1891 Census*. Cardiff: University of Wales Press, chapter 12, 259. ISBN 0708315364

7.39 Llywodraeth Cynulliad Cymru/Welsh Assembly Government, 1998. *Digest of Welsh Historical Statistics 1700-1974. Table 1.16d Language. Number of Welsh speakers, by sex, Cardiganshire 1891-1971*. Available from: <http://wales.gov.uk/topics/statistics/publications/dwhs1700-1974/?lang=en> [Accessed 4 Apr 2009]

7.40 *ibid*, Table 1.13 *Population of Towns 1801 – 1971*

7.41 *Kelly's Directory of South Wales 1895*. London: Kelly & Co, 57

In discussing the main linguistic characteristics of the Aberystwyth community, Smith reports^{7.42}:

‘ . . . A total of 6 683 individuals (aged 2 years and over) were enumerated in 1 558 households in Aberystwyth in April 1891. There is no record of the language spoken by forty individuals, and five individuals could speak foreign languages . . . ’,

and,

‘ . . . 4 884 (73.6 per cent) were able to speak English ’

To summarise, Smith refers to the population of Aberystwyth as comprising 6 635 subjects aged 2 years and over. This present study has identified 6 624 subjects of all ages in Aberystwyth with the variance from the ‘official’ figure of 6 725 having been explained in chapter 2, above.

Table 2, below, provides a comparison between the numbers cited by Smith and the values derived from the present study of Aberystwyth (under RG12/4558). These reported results have been used to establish a *key* principle to be applied throughout the remainder of this chapter. That is, how to define Welsh speakers in relation to the total population.

Table 2

RG12/4558	Total	3+ years	Both	English only	Welsh only	Others	% Welsh-speaking
Males	2 785	2 631	1 415	538	667	11	79.1
Females	3 839	3 683	1 903	790	972	18	78.1
Total	6 624	6 314	3 318	1 328	1 639	29	78.6
Smith/ CAWCS		2+ years	Both	English only	Welsh only	Others	% Welsh-speaking
		6 365	3 482	1 402	1 751	45	78.9

Note: For the Census of 1901, and later, the age threshold for reported Welsh language ability was set at 3 years and over^{7.43}.

7.42 Smith, R, 1999. Aberystwyth (Cardiganshire). In: Parry, G and Williams, M A, eds. *The Welsh Language and the 1891 Census*. Cardiff: University of Wales Press, chapter 12, 258. ISBN 0708315364

7.43 Higgs, E, 1991. *Making Sense of the Census*. London: HMSO, 77. ISBN 0114402191

For the purposes of the present study it has been decided not to classify language ability under the three separate headings – ‘Both’, or ‘Welsh only’, or ‘English only’. Instead just two categories are used – ‘Welsh-speaking’ (meaning ‘Both’ + ‘Welsh only’) and, ‘English only’, and for subjects aged 3 years and over. Using this basis of calculation the proportion of Welsh speakers in Aberystwyth in 1891 is 78.6 per cent (see Table 2, above). It is suggested that this is a more conservative approach which reduces the risk of error and sets aside the often blurred, undoubtedly controversial, probably artificial and confusing attempt to distinguish between ‘Welsh only’ and the Welsh-speaking component encompassed with ‘Both’. In setting out this principle it is understood that it may not be possible to make direct comparisons with the CAWCS study. However, it is not the intention here to contradict the Robert Smith study, or any other work, or question the methodology used. Instead the aim is to build upon some of the themes derived in the CAWCS study and produce an extended, added-value, independent analysis from the raw data. Using this definition of Welsh-speaking capability for subjects aged 3 years and over, living in Aberystwyth, it was calculated that 78.6 per cent of the population satisfied these criteria. This compares very well with the CAWCS study for subjects aged 2 years and over where a value of 78.9 per cent was reported. This convergence suggests that the definition used for the present study is reliable and robust. The CAWCS study looked at language and population age, gender, place of birth, household composition, parental influence and occupation. The present

chapter considers language and age, gender and (within certain limits) place of birth, but not household characteristics.

The research undertaken by Smith^{7.44} showed that over three-quarters of subjects across all age groups over five years of age were Welsh-speaking. For younger people he was able to draw a connection between their ability to speak English and local employment and the education system. Women accounted for fifty-eight per cent of the population of the town and seventy-eight per cent were able to speak Welsh, compared with seventy-nine per cent of men; an insignificant difference in percentage terms but there was, in actual numbers, a majority of over 800 women over the men in the town.

He observed that the town supported no Welsh language newspaper but was, physically and spiritually, dominated by the chapels^{7.45}. English was the dominant language of learning in school and college. Seventy-nine per cent of the population was able to speak Welsh with seventy-four per cent able to speak English. In Ceredigion, as a whole, ninety-five per cent of the population was able to speak Welsh. Smith, most eloquently, summarises Aberystwyth as having a 'complex nature', displaying 'the archetypal characteristics of Victorian Wales, dominated by an assertive community and a theocracy of ministers and elders'^{7.46}. He concluded that Aberystwyth justified its reputation as a holiday resort catering for English visitors and as a centre of Welsh learning but in so doing was perceived as an élitist urban

7.44 Smith, R, 1999. Aberystwyth (Cardiganshire). *In*: Parry, G and Williams, M A, eds. *The Welsh Language and the 1891 Census*. Cardiff: University of Wales Press, chapter 12. ISBN 0708315364

7.45 *ibid*, 256-259

7.46 *ibid*, 270

community quite separate from its rural hinterland where a quarter of population were monoglot Welsh speakers.

Smith calculated that ninety-three per cent of subjects enumerated in the town and born in Ceredigion were able to speak Welsh. That figure compared with ninety-one per cent for town residents born in Meirionnydd and seventy-six per cent for those born in Glamorganshire. He found that some occupations were characterized, but not dominated, by English speakers, citing the forty per cent in the public services and professionals sector who had no Welsh, in comparison with builders and allied trades where ninety per cent of operatives were Welsh-speaking.

7.5 Language capability across geographic location

This present study uses data captured for nineteen parishes. For the purposes of analysis these nineteen are characterised under twenty districts. Llanbadarn Fawr parish has been artificially divided into two districts. The first district has been called Llanbadarn Fawr (Ilar) - comprising Issa Yndre, Ucha Yndre, Faenor Uchaf, Faenor Isaf and Llanbadarn-y-Creuddyn Isaf. The second district has been called Llanbadarn Fawr (Uchaf) – comprising Cwmrheidol, Llanbadarn-y-Creuddyn Uchaf, Melindwr (Capel Bangor), Parsel Canol and Trefeurig. This artificial split is justified because the base parish of Llanbadarn Fawr is disproportionately large in area, with such a wide variation in characteristics that meaningful analysis is difficult. Even with this split the population of Llanbadarn Fawr (Uchaf) is over 3 000; much larger

than that of Aberystwyth Holy Trinity (2 300 subjects), and greatly exceeding Ystrad Meurig with its population of just 126.

7.5.1 Language and gender

Figures 56 and 57, below, show the percentages of male and female Welsh speakers (as defined above) in each of the twenty study districts, relative to the arithmetic mean for the study area. In comparing these two charts it may be seen that there was no significant difference between the proportions of men and boys (a mean value of ninety-one per cent) and women and girls (a

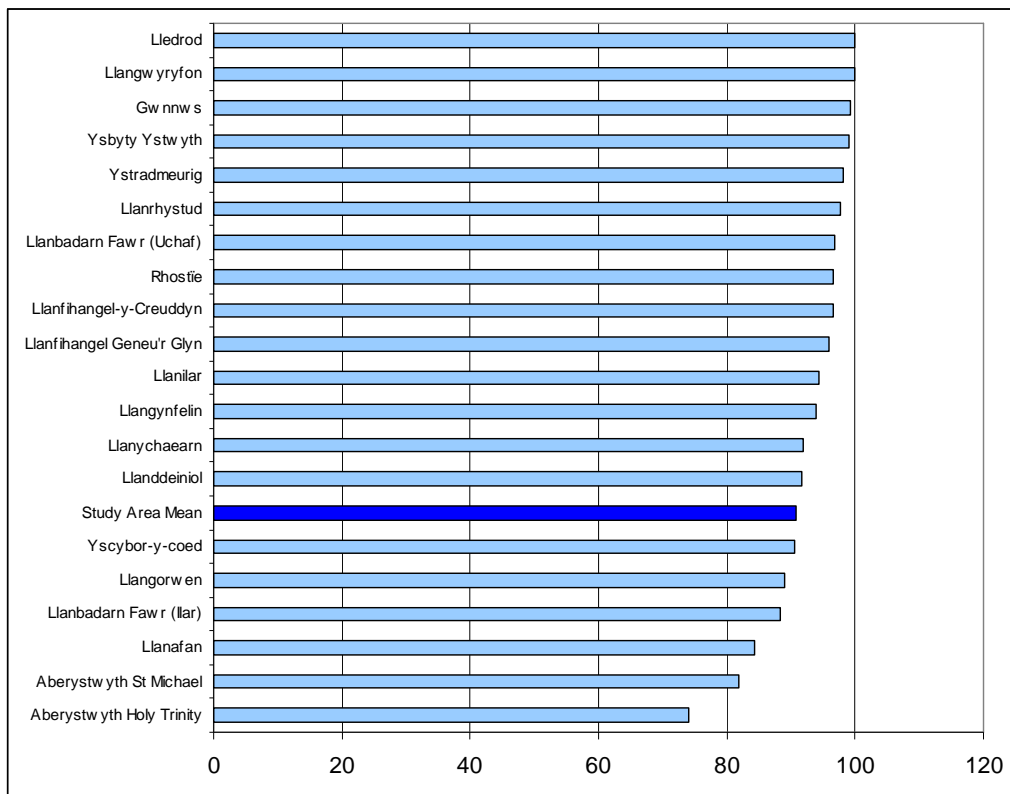


Figure 56 – Percentage of male Welsh speakers aged 3 and over

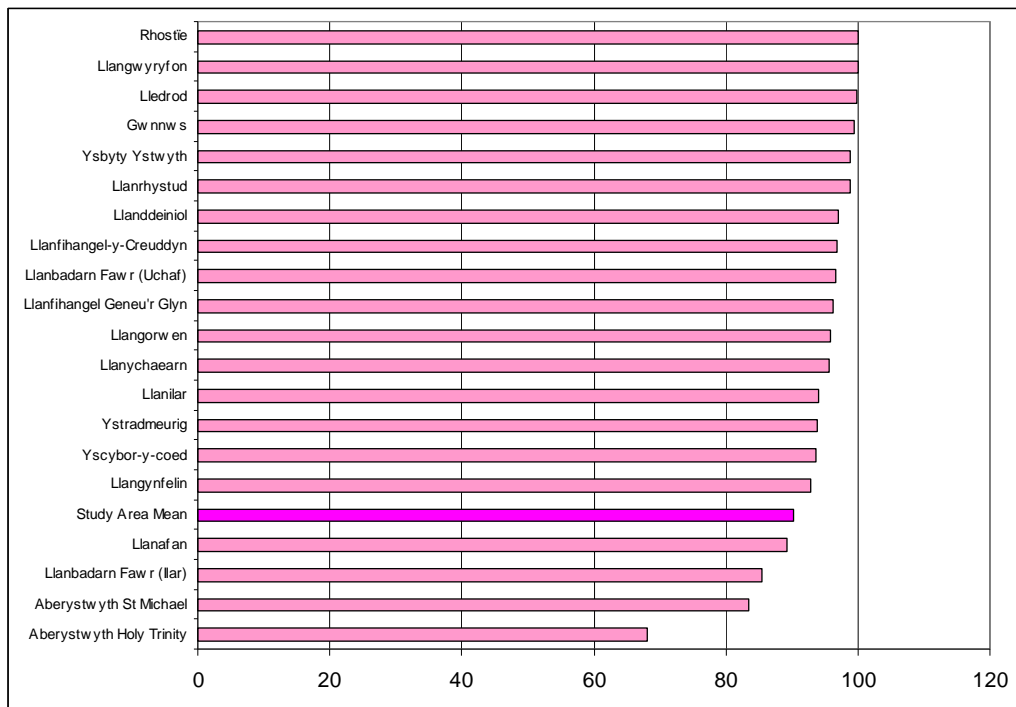


Figure 57 – Percentage of female Welsh speakers aged 3 and over

mean value of ninety per cent) who were Welsh-speaking. These findings can be compared with those of Smith. In his more geographically restricted sample he showed that sixty per cent of subjects aged between fifteen to forty-four years were women. This cohort included a large number of single women employed in domestic service. He suggests that bi-lingual domestic servants found it easier to obtain employment in the town^{7.47}. There were fewer employment opportunities for young men who were already attracted by the higher wages on offer in industrial south Wales. Smith asserts that male migration into the town was lower than female in-migration resulting in a marked gender imbalance. That there was a gender imbalance in the town is beyond doubt; this is demonstrated in Figure 22, above. However, there is

7.47 *ibid*, 261

no clear evidence that this imbalance can be attributed to migration of subjects from the adjoining rural areas. Figure 31, above, shows that there are more migrants into Aberystwyth from the rest of Wales together with England, than from other locations in Ceredigion.

7.5.2 Language and age

In his study of variations in language capability for different sectors of the population characterised by age, Smith uses six age bands ranging from 2 to 65+. In a study of coal-mining communities in the Garw Valley^{7.48} Price uses fourteen age bands from 0 to 65+. Smith reported on languages spoken, by age, for subjects aged 2 years and over.

From Smith, his Table 2^{7.49}:

Age	Welsh only	Both	English only	Total
2-5	167	167	119	453
6-14	311	638	283	1232
15-24	299	922	326	1547
25-44	400	939	362	1701
45-64	376	627	238	1241
65+	198	189	74	461
Total	1751	3482	1402	6635

7.48 Price, W M, 2000. *Aspects of urban history of the Garw Valley c 1870-1914*. Thesis (PhD). University of Wales, Cardiff.

7.49 Smith, R, 1999. Aberystwyth (Cardiganshire). In: Parry, G and Williams, M A, eds. *The Welsh Language and the 1891 Census*. Cardiff: University of Wales Press, chapter 12, 260. ISBN 0708315364

In this present study eight age bands have been selected for each gender:

- 3-5 years
- 6-14 years
- 15-24 years
- 25-34 years
- 35-44 years
- 45-54 years
- 55-64 years
- 65+ years

Figure 58, below, shows the variation in Welsh-speaking ability by age range and gender. This chart is based on the returns covering some 22 600 subjects – aged 3 years and over. There is little overall difference between the genders – an unweighted arithmetic mean of ninety-one per cent for women and ninety per cent for men. At a more detailed level the chart demonstrates that there are some perceptible trends and differences. The decline, seen here, in the relative proportions of Welsh speakers beyond

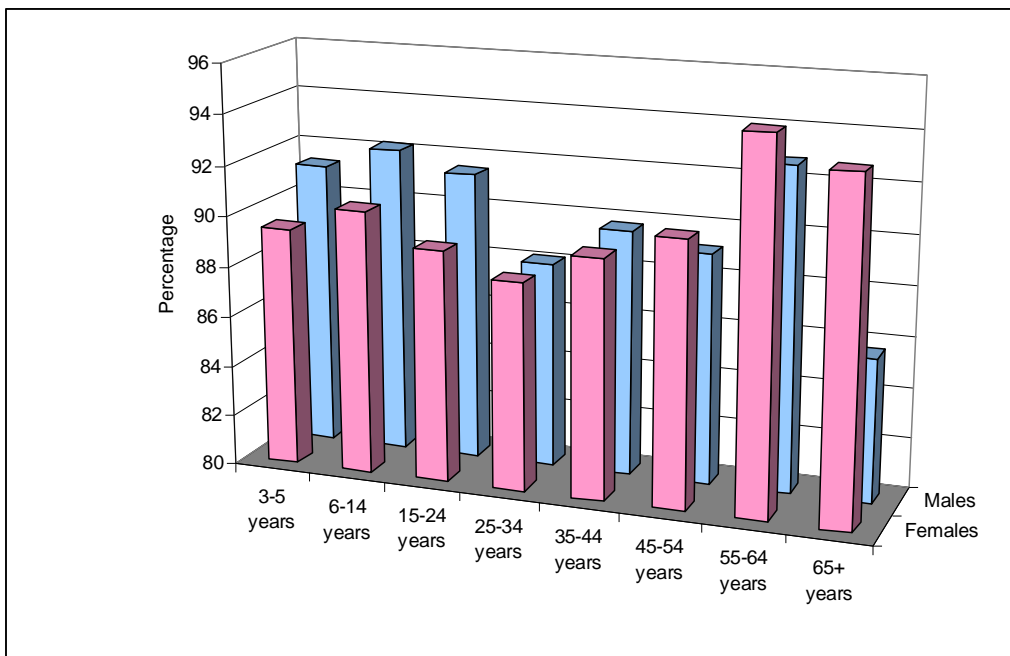


Figure 58 - Welsh-speaking ability by gender and age range

childhood and teenage years is likely to be due to an increase in the number of bilingual subjects benefiting from basic primary schooling. The increase in the proportions of Welsh speakers from middle age may be due to monoglot Welsh speakers who would have little formal education in their youth outside Sunday School. This may be especially true for older women if they had stayed at home, been less mobile, and not entered the labour market. Beyond middle-age and especially in the 65+ age range fewer men than women are Welsh-speaking. This may be further confirmation that older women were less mobile than their male equivalents. There could be other variables at play, for example, migration.

The Smith/CAWCS study embraced the town of Aberystwyth and its two parishes – St Michael and Holy Trinity. In the present study it is not realistic to analyse all nineteen parishes (represented by twenty study districts) down to the most detailed level. In order to achieve a balance between detailed analysis of the global data and practical limitations of size and effort underlying the study, three districts have been selected for closer examination. As is the case with the CAWCS study their selection is arbitrary but, it is argued, defensible. The three districts are, Aberystwyth St Michael – representing an urban parish with a population of 4 316, Llanrhystud – representing a pastoral/agricultural parish with a population of 1 161, and Llanbadarn Fawr (Uchaf) representing mining and upland/sheep-farming communities with a population of 3 163.

Figures 59 and 60, below, show the relative percentages of Welsh speakers for the three selected districts, by gender and by age group. These two charts

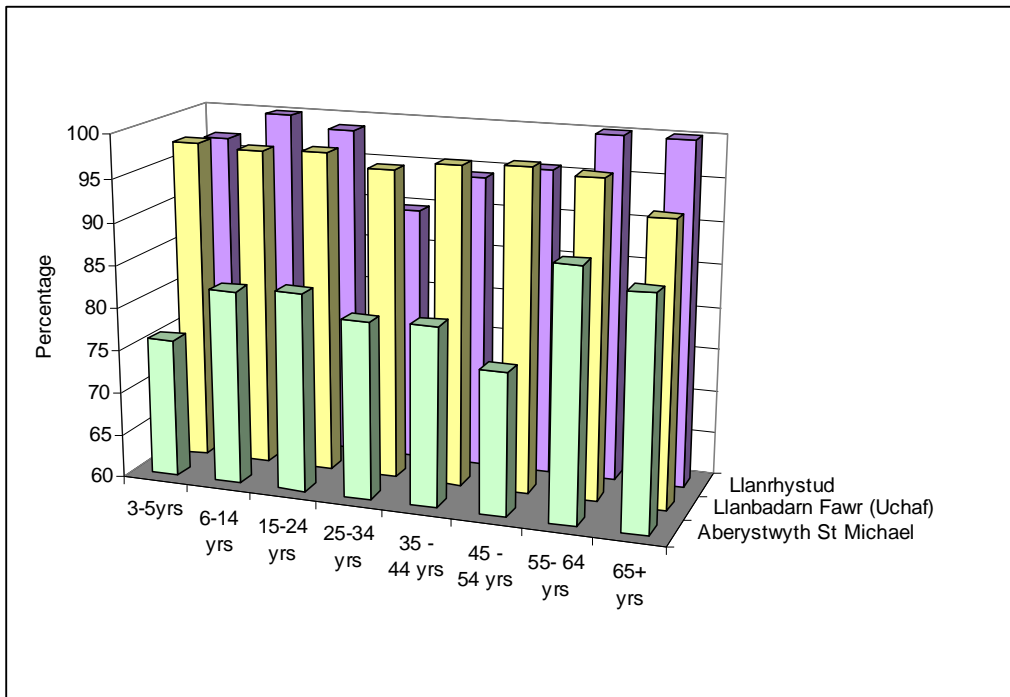


Figure 59 - Percentage of male Welsh speakers by age band - selected districts show that, compared to Aberystwyth St Michael, the proportions of Welsh speakers in the rural areas remain fairly constant across the age bands. There is more variation with men than with women and this again is probably

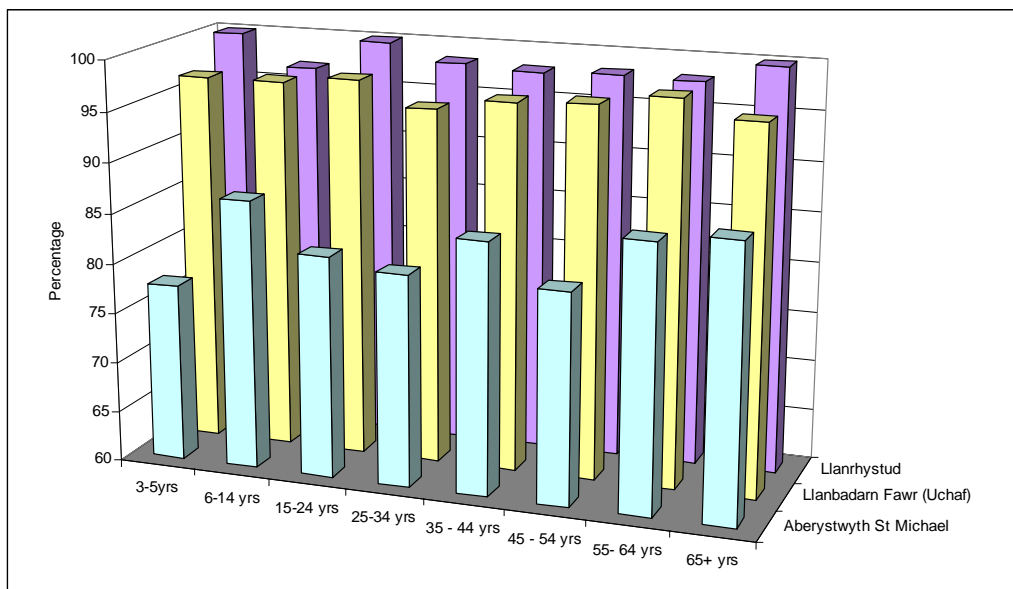


Figure 60 - Percentage of female Welsh speakers by age band - selected districts

a reflection of lower mobility in country women. The patterns seen in these two charts tend to confirm the observations by Henderson and by Smith explaining language-gender differences and language-age differences in terms of inward, outward and intra-area migrations.

7.5.3 Language and place of birth

In his study of Aberystwyth, Smith (his Table 4^{7.50}) showed language ability for subjects categorised by Welsh county of birth, for England, and for 'Other'. 'Other' included Scotland, Ireland, Europe, the New World and the Colonies. He showed that of some 700 or so subjects born in England, eighty-three per cent were monoglot English speakers.

This part of the present study considers the origins, firstly, of Welsh speakers

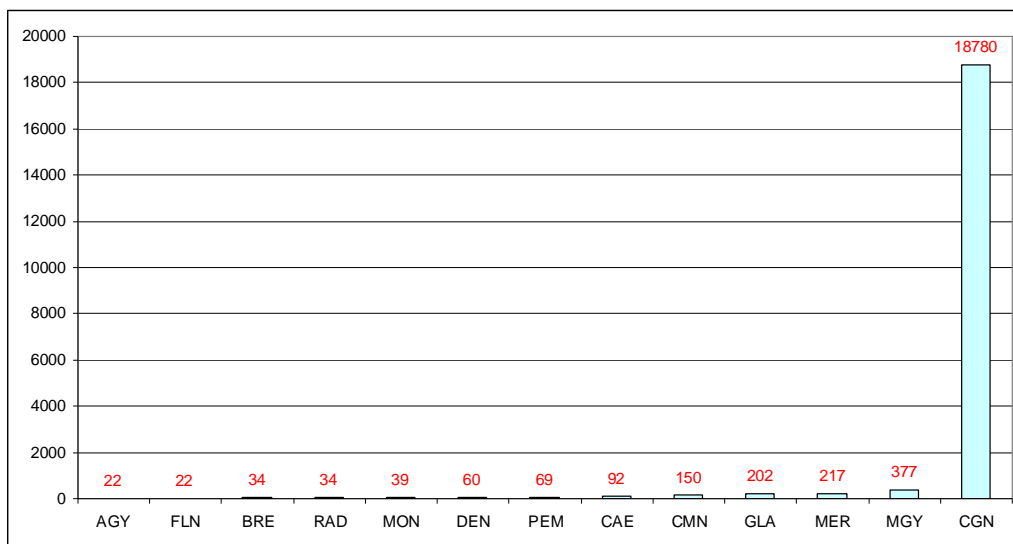


Figure 61 – Numbers of Welsh speakers by Welsh county of birth, aged 3+ years, both genders

7.50 *ibid*, 262

(as previously defined). Figure 61, above, shows the numbers of Welsh-speaking subjects of all ages (ie three years and older) and of both genders, enumerated in the study area and categorised by Welsh county of birth. It can be seen that the Welsh-speaking community is completely dominated by natives of the county of Ceredigion.

It has been established, therefore, that most residents of the study area (and almost certainly of Ceredigion) in 1891 were natives of the county and were Welsh-speaking. Figure 62, below, shows the most numerically significant places of birth, by region, for those residents of the study area, aged three years and over, who had no Welsh. There were 841 identifiable males and 1 166 females. It is no surprise that incomers from England accounted for the majority of those subjects who did not speak Welsh.

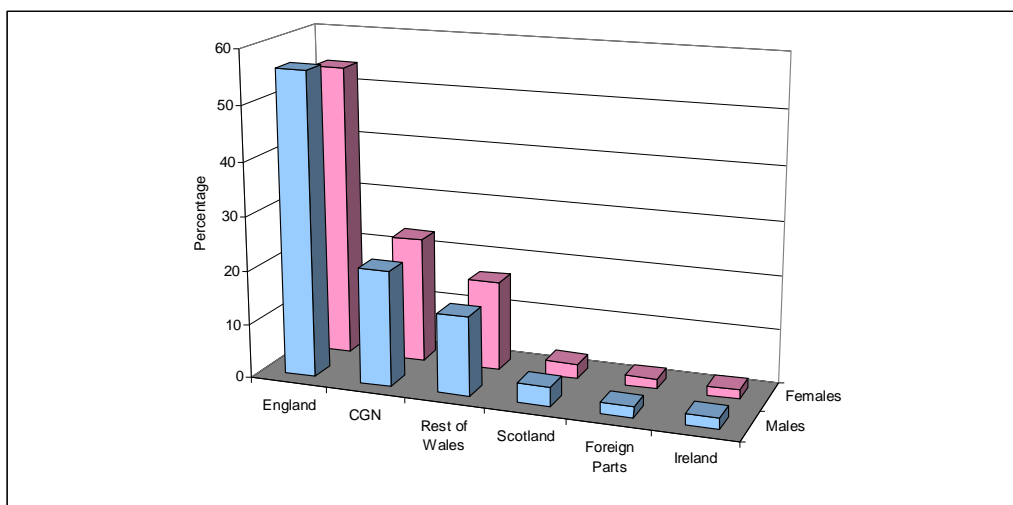


Figure 62 – Places of birth of non-Welsh-speaking subjects by region, both genders
 The proportion of non-Welsh speakers who were born in Ceredigion was about twenty per cent; conversely, therefore, the proportion of native Welsh speakers was just under eighty per cent. There was little difference between the genders.

Figure 63, below, shows the numerically most significant places of birth, by region, for Welsh-speaking residents of the study area, aged three years and

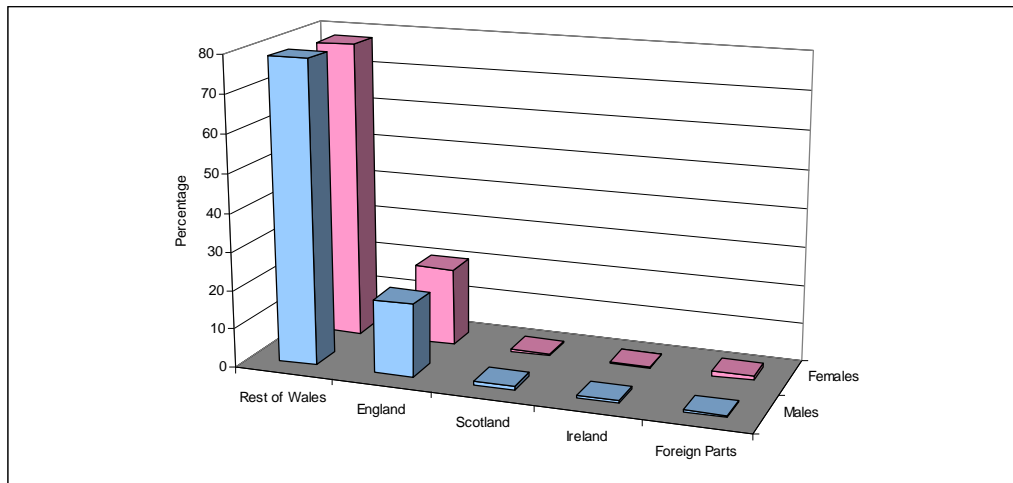


Figure 63 – Welsh-speaking subjects resident in the study area born outwith Ceredigion

over, who were born *outwith* the county. The value for ‘rest of Wales’ does not therefore include Welsh-speaking subjects born in Ceredigion. There were 871 males and 817 females in this sub-set. There was no difference between the genders. It may be seen that around eighty per cent of Welsh-speaking incomers had been born in the remaining twelve counties with about twenty per cent of subjects being born in England. The subject of inward migration has been dealt with in chapter 4.

Figure 64, below, shows the places of birth of the eighty-or-so subjects within the study area who could speak Welsh and who were known to have been born in England, in other parts of Great Britain, or elsewhere. The numbers born in London and Middlesex and in Lancashire and Cheshire account for the majority of subjects in this cohort and probably represent an affirmation of the family ties between Ceredigion and these places outside Wales. These

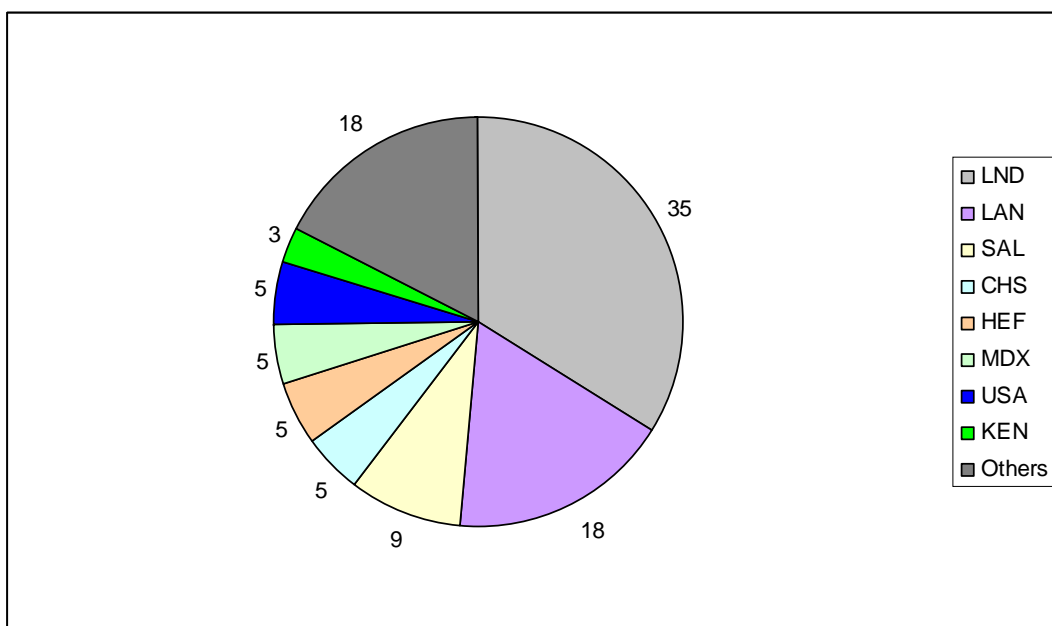


Figure 64 – Numbers of Welsh speakers born outside Wales - by county and by country

results are in line with the generalized observations by Robert Smith and by Emrys Jones concerning links with Welsh communities in London, Liverpool, Manchester, Shrewsbury and Chester^{7.51}.

Smith notes that, in addition to public administration, one area of activity where English speakers were deliberately recruited was the railways^{7.52}. He points out that the Cambrian Railways preferentially recruited English speakers because that was the language of communication of the business. Senior staff and other company servants in contact with the public had to be able to deal with their passengers and customers. His reference in the same paragraph to the impressive railway station in the centre of Aberystwyth town

7.51 *ibid*, 263; Jones, E, 1998. *The Welsh Language in England c. 1800-1914*. In: Jenkins G H, ed. *Language and Community in the Nineteenth Century*. Cardiff: University of Wales Press, 235. ISBN 0708314678

7.52 Smith, R, 1999. *Aberystwyth (Cardiganshire)*. In: Parry, G and Williams, M A, eds. *The Welsh Language and the 1891 Census*. Cardiff: University of Wales Press, chapter 12, 269. ISBN 0708315364

is, perhaps, misleading. The railway station is architecturally impressive but it was not built until thirty-five years after the 1891 census.

7.6 Conclusions

This chapter reviews the background to the inclusion, for the first time, of the Welsh language question in the 1891 census, in the context of the contemporary cultural and political climate and emerging nationalistic awareness. Earlier studies are reviewed and it is shown that some researchers have presented conclusions based on selective, small and statistically unrepresentative populations within Ceredigion. A case is made for the use of a different definition of Welsh language ability, which, it is claimed, produces more reliable and robust answers. The present study provides details of variations in the proportions of Welsh speakers, by gender, across the different communities. An explanation is provided for the raw data followed by presentation and interpretation of results derived from robust measurements relating language ability to gender, to subject age and to place of birth.

Trends and gender differences are interpreted linking variations in Welsh-speaking ability with age, possibly linked to access to education and employment history, mobility and migration patterns. Comparisons are drawn between Welsh-speaking ability for subjects from different localities within the study area, from the rest of Wales and from England, and beyond. Place of birth is shown to be a major factor affecting Welsh language ability and this is

linked to variations found in different communities across the study area. It is clear that at the end of the nineteenth century, despite the concerns voiced about the detailed mechanics of the census process, Ceredigion was a stronghold of the Welsh language.

Finally, in considering all these measures, indicators and attempts to draw meaningful conclusions the reader should not lose sight of the sentiments expressed by Gerald Morgan^{7.53}, when commenting on the some of the numerical values derived and conclusions inferred in the CAWCS work: '... always remembering that such terms are subjective'.

7.53 Morgan, G, 2006. *Ceredigion: a Wealth of History*. Llandysul: Gomer Press, 327. ISBN 1843235013

Chapter 8 - The study of occupations as indicators of economic activity

8.1 Introduction

This chapter attempts a structured classification of reported occupations as recognized in 1891 and aims to apply that knowledge to create an understanding of the commercial and economic structures across the study area. There is a wealth of authoritative, descriptive material covering the economic and social framework of north Ceredigion in the late nineteenth century. Gerald Morgan^{8.1} has considered changes in agriculture in Ceredigion from the seventeenth century to the present time. Changes in market conditions and husbandry techniques which resulted in reduced employment opportunities for those engaged in agriculture are discussed. He concluded that small tenant farmers and their families existed on the margins of economic viability. Gerald Morgan goes on to show how an essentially agricultural and rural economy was self-sufficient in many ways. He showed how blacksmiths, spinners and weavers, and brewers and innkeepers were part of the social and economic structure in rural and urban communities. There were shopkeepers who were able to satisfy every want from buttons to gunpowder, through local retail outlets. Morgan^{8.2} detailed the development of the mining of non-ferrous ores and describes the work of the miners and the lives of their families.

8.1 Morgan, G, 2006. *Ceredigion: a wealth of history*. Llandysul: Gomer Press, 147-171. ISBN 1843235013

8.2 *ibid*, 172-184

Moore-Colyer^{8.3} considered the patterns and structures of farming in Ceredigion in the nineteenth century. The nature of the crops grown, the livestock reared and the factors dictating change are reported. He pays particular attention to the business relationship between landlord and tenant, and to the often parlous financial state of the farming industry. These issues have been summarized in section 1.2.2, above. David Jenkins^{8.4} has reviewed the customs, culture and social conventions that characterised rural communities in Ceredigion highlighting the connections between language, husbandry and class.

In Aberystwyth there was, in 1891, a street called Shipbuilders Row or Shipwrights Row, now South Road, the location of shipbuilding operations together with the associated trades of rope and sail-making, block-making and fabrication of chains and anchors^{8.5}. 244 vessels were built between 1800 and 1880 and the majority were small single-masted, flat-bottomed smacks suitable for the coastal trade. In Llanbadarn Fawr churchyard there is a memorial inscription '*Er serchus gof am William Williams, o'r Rope Walk, Aberystwyth, yr hwn a fu farw Mawrth 7fed 1875 ...*'. Her Majesty's Waterguard occupied premises in Custom House Street. Moelwyn Williams^{8.6}

8.3 Moore-Colyer, R J, 1998. Agriculture and land occupation in eighteenth- and nineteenth century Cardiganshire. *In: Jenkins, G H and Jones, I G, eds. Cardiganshire County History Volume 3 Cardiganshire in Modern Times*. Cardiff: University of Wales Press, 19-50. ISBN 0708314899

8.4 Jenkins, D, 1998. Land and community around the close of the nineteenth century. *In: Jenkins, G H and Jones, I G, eds. Cardiganshire County History Volume 3 Cardiganshire in Modern Times*. Cardiff: University of Wales Press, 94-122. ISBN 0708314899

8.5 Jenkins, D, 1998. Shipping and shipbuilding. *In: Jenkins, G H and Jones, I G, eds. Cardiganshire County History Volume 3 Cardiganshire in Modern Times*. Cardiff: University of Wales Press, 182-197. ISBN 0708314899

8.6 Williams, M I, 1998. Commercial relations. *In: Jenkins, G H and Jones, I G, eds. Cardiganshire County History Volume 3 Cardiganshire in Modern Times*. Cardiff: University of Wales Press, 198-211. ISBN 0708314899

notes that coal, culm and lime were trans-shipped from Aberystwyth to Clarach and Borth. W J Lewis^{8.7} shows, in detail, how mineral mining and shipbuilding led to the establishment of a number of foundries in Aberystwyth. The most notable enterprise was that of George Green, in Alexandra Road, where steam engines and jiggers for ore dressing for the mines in the Rheidol valley were produced and, in due course, exported to silver mines in south America. These undertakings also supplied components for the water and sanitation schemes that were being undertaken in response to the demands of the town as it expanded, modernized its infrastructure and developed its tourist industry. Lewis^{8.8} discusses the part played by tanning and associated trades in the localities of Skinner Street and Smithfield Road – now Park Avenue. Smithfield Road was also the site of the first gas works; this was subsequently relocated to Llanbadarn Fawr alongside the northern boundary of the railway line and where sidings were installed to take the trains of coal wagons. Coal gas was used to light some streets as well as the homes of domestic consumers. Aberystwyth supported a number of breweries supplying the large number of taverns in the district. Associated with this industry were coopers and maltsters. In addition to the most obvious indications that Aberystwyth was a tourist resort, together with Borth – namely, the significant number of hotels and lodging houses, there were a number of associated enterprises that provided employment opportunities. These included fancy-goods shops, photographers and lapidaries. In addition

8.7 Lewis, W J, 1980. *Born on a Perilous Rock*. Aberystwyth: Cambrian News, 95-98. ISBN 0900439041

8.8 *ibid*, 102-103

to the University College and the occupations associated with that institution, Aberystwyth was a garrison town – it had been since Norman times. A number of serving soldiers are enumerated in the census returns. The status of the town as a commercial centre is reflected in the number of bank branches^{8.9}, with customers that included the College and the County Council, the latter having been created in 1889. Kelly's Directory^{8.10} of 1895 lists branches for the London & Provincial Bank (later Barclays), National Provincial Bank (later NatWest) and North & South Wales Bank (later HSBC), as operating in Aberystwyth. These facilities clearly characterized the town as being an important regional centre providing services to businesses, to local government and with key transport links.

8.2 Classification of occupations

The 1891 census returns contained a Column 11, headed Profession or Occupation. Using this information it should be possible to create a model describing economic activities across all social groups. That is the aim here: to measure the ranges of activities undertaken through classification and quantification of personal occupations and, then, to plot and interpret the measurements in order to compare activities across the communities covered by the study.

It has been suggested that it is not possible to analyse raw occupational data without application of a system of classification. In support of this proposition,

8.9 *ibid*, 139-145

8.10 *Kelly's Directory of South Wales 1895*. London: Kelly & Co, 67

Allen^{8.11} had found that those involved in the legal profession in the city of Winchester were recorded in 92 different ways in the census returns, demonstrating an obvious need for a classification or structured coding system. The justifications for and dangers inherent in the use of a system of classification were alluded to in chapter 2 in the present study. Allen elected to use a coding system based on that developed by Booth^{8.12} in 1886 and modified by Armstrong^{8.13} for his York study. This chapter attempts an analysis of occupations together with an interpretation of those trades and professions found within and across the communities covered by the study area.

Armstrong has made a major contribution to the study of occupational data derived from Victorian census returns. His findings are both interesting and informative and very relevant to the present study. He offers advice for researchers seeking to exploit the information on occupations communicated through the manuscript enumerator's books (CEBs).

Individuals may be categorized through their occupations by industrial classification, or by social rank or status. For example, an individual who is a clerk by occupation may be employed in primary or extractive industry, in manufacturing or service industry, or in local government. Even where it is possible to establish the context within which the clerk may be employed, the

8.11 Allen, M A, Nov 1999 *A Railway Revolution? A census-based analysis of the economic, social and topographical effects of the coming of the railway upon the city of Winchester c 1830-c 1890*. PhD Thesis, University of Southampton, Section 2.5.2

8.12 Booth, C, 1886. Occupations of the people of the United Kingdom, 1801-81. *Journal of the Royal Statistical Society*, 314-435

8.13 Armstrong, W A, 1972. The use of information about occupation. *In: Wrigley, E A, ed. Nineteenth-century society. Essays in the use of quantitative methods for the study of social data*. Cambridge: University Press, 191-310. ISBN 0521084121

nature of his employment may present a more useful insight into the local economy than his place in society. Armstrong has attempted to create an objective model for the otherwise subjective perception of socio-economic class. He has provided a detailed case for using the Registrar General's 1951 scheme of social stratification as the basis for a semi-quantitative analysis of the socio-economic structure of nineteenth century communities. The Registrar General's 1951 classification divided the population into five broad categories:

Class A professional etc. occupations

Class B intermediate occupations

Class C skilled occupations

Class D partly skilled occupations

Class E unskilled occupations

The occupation of a person determined the social class to which they were allocated. Armstrong took a sample of occupations cited in the CEBs for the City of York in 1841 and in 1851, produced a list of occupations^{8.14} and then allocated them to a corresponding social class. Some examples are:

Dentist - Class A; Station Master, Professor of Music – Class B; Dressmaker, Master mariner – Class C; Gardener, Washerwoman – Class D; Errand boy, Labourer – Class E

This approach to the categorization of subjects into these social classifications has not been taken forward in this study. It was considered that the scheme originally devised by Booth was more appropriate for a study

8.14 *ibid*, 205-208

where the emphasis is placed rather more on economic parameters than on social history. Booth's detailed breakdown into several hundred occupational divisions and sub-divisions was considered to be a more suitable basis for a study linking occupation to changes in economic activity, demographics and settlement patterns. A number of researchers have adopted the scheme proposed by Booth and amended by Armstrong, including Walker, Docherty, Henderson and Nair and Poyner^{8.15}. Allen^{8.16} has used the information contained in Census Enumerators' Books (CEBs) to study the impact of the coming of the railway on the economic, social and physical development of the City of Winchester. A chronological series of nineteenth century CEBs was examined, together with other sources such as trade directories, share contracts, photographs, maps and plans. Allen described the city before the arrival of the railway and charted its growth over the years. It was noted that changes in boundaries between censuses meant that it was difficult to assess changes over time. Limitations in the use of census records are highlighted. It is noted that CEBs are condensed and transcribed versions of household schedules giving rise to errors during copying and from illegibility of some of the entries. Allen comments that enumerators were of various social standings, ages and abilities in literacy and that different

8.15 Walker, P, 2001. Decline and change in some West Devon market town parishes, 1841-1891. Thesis (PhD), chapter 8, University of Exeter; Docherty, C 1988. Migration, ethnicity, occupation and residence in contrasting West of Scotland settlements: the case of the Vale of Leven and Dumbarton, 1861-1891. Thesis (PhD) University of Glasgow; Henderson, E D J, 2000. Linguistic Homogenisation in the Periphery: The Case of North Cardiganshire. Thesis (MPhil) University of Wales, Aberystwyth; Nair, G and Poyner, D, 2006. The Flight from the Land? Rural Migration in South-east Shropshire in the Late Nineteenth Century. *Rural History*, 17, (2). 167-186

8.16 Allen, M A, 1999. *A Railway Revolution? A census-based analysis of the economic, social and topographical effects of the coming of the railway upon the city of Winchester c 1830-c 1890*. Thesis (PhD) University of Southampton

enumerators would have different ways of interpreting the guidelines. At a more distant level it is suggested that as London census clerks were temporary staff they may have introduced errors or failed to detect errors in the returns. For example, place of birth was sometimes found to be misspelled. Those born in 'foreign parts' or in Scotland or in Ireland were not required to give precise information on their place of birth. There is evidence that age and occupational data are prone to error. The main focus of the Allen study was on occupational statistics that have the potential to provide valuable information on social and economic structures. That being so, difficulties were encountered with subjects described simply as 'Labourer' without further elaboration, with the poor reporting of women's occupations, and agricultural jobs that were seasonal and subject to change through the year. For his study Allen used the κλειω historical database^{8.17}. This is a highly sophisticated and rather specialised research tool; the use of which was justified because it can handle a wide variety of source material including maps and drawings. It was found that the parameters of age, employment, marital status, relationship, and gender were sufficiently concise to allow tabulation of raw data and subsequent analysis. However, it was not possible to analyse raw occupational (as opposed to employment) and birthplace data without further classification. Allen gives a great deal of attention to the classification and analysis of occupational data found in census returns. Job titles were retained and also complemented by a coding system. This cannot be a complete answer to inconsistencies and ambiguities. For example, the

8.17 Woollard, M and Denley, P, 1993. *Source-Oriented Data Processing for Historians: a Tutorial for κλειω*. St Katharinen: Max-Planck-Institut für Geschichte. ISBN 3928134922

Stationmaster at Winchester was described as an Agent and thus classified in the industrial and commercial services sector although he clearly was an employee of the railway, and so in the transport sector. Any coding system will have faults and involve compromises as classification codes imply a gain in ease of analysis in return for the possible dilution of raw information. In other words errors might be reduced at the expense of subtleties and inferences being lost. With a coding system there may be no formal attempt to differentiate between a person's social status in employment and his or her economic role. Census returns often cite a clerk, dealer, or labourer etc, without defining the relevant trade or business sector. A carpenter could be a master, labourer or journeyman (or apprentice!). Allen elected to use a coding system based on that developed by Booth in 1886 and modified by Armstrong for his York study^{8.18}.

8.3 Previous attempts to analyse occupations in north Ceredigion

The first comprehensive attempt was probably Benjamin's study of occupations^{8.19} for Aberystwyth town, 1841 to 1871. He made a simple count of reported occupations for 'main classes' of occupations for the census years 1841, 1841, 1851, 1861 and 1871. He devised twenty-one classes ranging, alphabetically, from 'Agricultural and other labourers' to 'Workers involved

8.18 Armstrong, W A, 1972. The use of information about occupation. *In: Wrigley, E A, ed. Nineteenth-century society: Essays in the use of quantitative methods for the study of social data.* Cambridge: Cambridge University Press. Chap 6, pp 191–310. ISBN 0521084121

8.19 Benjamin, E A, 1986. *Footprints on the Sands of Time: Aberystwyth 1800 – 1880.* Carmarthen: Dyfed County Council. ISBN 0860750159

with coaches and with horses'. Benjamin described and reported occupations by these pre-defined groups in order to provide a basis for the study of demographics and social structure and to provide an assessment of the economic development of the town over the thirty years of his study. He concluded that precise analysis was difficult due to the missing parts of the 1861 census and *Footprints* might be more correctly described as a descriptive catalogue rather than a structured quantification.

Benjamin goes on to examine the data for 1871 in greater detail. But in doing so he classifies the reported occupations in thirty-six categories, ranging from Servants to Auctioneers. One of his continuing classifications was that of 'Master mariners and mariners' where he reported census dates and numbers of subjects in Aberystwyth, thus: 1841 – 96, 1851 – 126, 1861 – 95, 1871 – 120. The 1871 figure was broken down further as:

Boatmen – 5, Fishermen – 3, Mariners – 73, Mariners (retired) – 7, Master mariners – 23, Master mariners (retired) – 4. Total – 120 (*sic*)

For some categories Benjamin identifies the individuals comprising the totals by name. There were twenty-six ministers of religion, including Roman Catholic Bishop William Bullen Collier, born Hutton, YKS and his chaplain Father Charles Limpens, born Belgium. Benjamin suggests that these two subjects were probably visitors to Aberystwyth. That observation raises two points about his study. He included visitors in his classification of occupations together with apprentices and assistants. That practice is also used in the present study with the additional proviso that, for a given occupation, no distinction has been made between those who have retired, or are assistants

or apprentices or journeymen. All have been included in the totals. Benjamin was able to show, in terms of simple arithmetic, that the most common occupation was that of servant but that observation included agricultural servants in addition to, for example, chambermaids. He also suggests that the town was not only a popular and fashionable coastal resort but that it was a location increasingly favoured by retired people^{8.20}. Robert Smith takes a different view suggesting that:

‘there is little evidence the town had become a retirement centre for large numbers of elderly English speakers as was the case in some of the north Wales coastal resorts’^{8.21} .

Moving out of the urbanised environment of Aberystwyth into the rural hinterland, Benjamin used census returns to study the occupations of the populations of Parcel Canol 1841 to 1881, Melindwr 1841 to 1871, and Cwmrheidol 1861 to 1871^{8.22}. He compared Melindwr, where the predominant activity was lead mining, with Parcel Canol, where agriculture and sheep farming were important. In both studies he catalogues the subjects who came from Cornwall, Devon and Ireland.

Benjamin, writing about missing parts of the Cwmrheidol 1861 census, warns that:

‘ . . .The shortfall in this instance is around 22 per cent and is sufficient to invalidate any full statistical comparison between the two decades. . ’

8.20 *ibid*, 133

8.21 Smith, R, 1999. Aberystwyth (Cardiganshire). *In*: Parry, G and Williams, M A, eds. *The Welsh Language and the 1891 Census*. Cardiff: University of Wales Press, 259. ISBN 0708315364

8.22 Benjamin, E A, 1987. Parcel Canol, Cardiganshire: a study of the censuses 1841-81. *Ceredigion*, 10 (4), 383-391; Benjamin, E A, 1983. Melindwr, Cardiganshire: a study of the censuses 1841-71. *Ceredigion*, 9 (4), 322-335; Benjamin, E A, 1981. The Enumeration District of Cwmrheidol, 1861-71: A comparative study. *Ceredigion*, 9 (2) 128-134

He suggests that the number of mariners absent at sea at census time might have contributed to the imbalance in the numbers of males and females but warns that conclusive evidence does not exist. He also observes that lead miners rarely survived beyond forty years of age. Benjamin concluded that beyond the coastal fringe the main economic activities were mining and agriculture, together with associated undertakings such as corn milling and woollen spinning and weaving. It has already been shown that, by 1891, mining activity was in decline (see section 1.2.4).

Spencer Thomas has analysed census returns for Llansanffraid, 1841 to 1851^{8.23}, but that work, like the studies of Benjamin, is anecdotal and descriptive rather than analytical. G J Lewis^{8.24} looked, somewhat superficially, at male and female occupations in Bow Street as recorded in the 1851 census returns. The main thrust of the work was a study of demographic changes for a population of 570. It was concluded that whilst the population figures and social structure remained static, there were significant underlying movements of individuals and families into and out of the village. That conclusion indicates that care is required when using a single census to chart change over time. That does not apply to the present study.

Benjamin's attempt at constructing a classification system for occupations in Aberystwyth has obvious limitations. It was devised for a small urban population which may be considered a special case. There was no provision for lead miners, or fishermen or those engaged in ship repairing; hence, sail-

8.23 Thomas, S, 1963. The enumerators' returns as a source for a period picture of the parish of Llansanffraid, 1841-1851. *Ceredigion*, 4, 408-421

8.24 Lewis, G J, 1966. The demographic structure of a Welsh rural village during the mid-nineteenth century. *Ceredigion*, 5 (3) 290-304

makers and ship-riggers were classified under 'Miscellaneous' along with the town crier and the castle keeper. The largest single occupational class was 'Servants'. Benjamin acknowledged that a chronological comparison was difficult due to missing parts for some census returns. The present study uses a form of the original Booth-Armstrong structure with some enhancement and amendment of the occupational codes to facilitate sorting in the Excel database. For example:

Booth classification:

Agricultural Sector	AG
Farming	AG.1
Farm bailiffs, stewards	
Farmers, graziers	

Present study:

Agricultural Sector	AG
01 Farming	AG01
Farm bailiffs, stewards	AG01.01
Farmers, graziers	AG01.02

The modified and developed structure is appended to this dissertation at F.

8.4 Coding of subjects and their occupations

The first step was to exclude subjects under the age of 10 years as they are unlikely to have been in employment. All subjects aged 10 and more years were allocated the relevant alpha-numeric code by reference to the structure and format set out in Appendix F. In many cases the identified occupation of a subject is described using a variety of words and expressions appropriate at the time. Allowance had to be made for this and that is where the use of a

structured coding system came into its own. This was, largely, a manual and interpretive exercise; it was not a process that lent itself to automatic coding within the Excel database. This point might be illustrated by reference to declared occupations in the enumerators' returns being given as: County Road Workman, or Labourer on highway, or Labourer on the Highway, or Parish Road Labourer, or Road Labourer. All these subjects were coded as BG03.02 - Road labourers.

Despite care and prior planning in the classification and coding of occupations, as described above, it was necessary to make many decisions on a subjective basis. For example a subject giving his occupation as 'Blacksmith at lead mine' was coded under Lead miners – MN01.06 and not under Blacksmiths - MF04.04. The justification for this approach is to give due weight to the source of the employment rather than the personal characteristics of the individual. This process is not always so clear-cut and obvious and many codes have been applied using less-than-perfect criteria. Armstrong^{8.25} has discussed this dilemma in some detail, pointing out that the Victorian census schedules were not helpful. It was never clearly established that the question covering profession or occupation required an answer that described the personal characteristics of the subject or their commercial or industrial affiliation. Throughout the present study the emphasis is on linking the occupation of the subject to the economic structure of the locality and not to create an insight into social class. Where a subject professed to have

8.25 Armstrong, W A, 1972. The use of information about occupation. *In: Wrigley, E A, ed. Nineteenth-century society. Essays in the use of quantitative methods for the study of social data.* Cambridge: University Press, 191-192. ISBN 0521084121

more than one occupation, the relevant codes were applied up to a maximum of two.

Many women gave inappropriate information when reporting occupation. Entries such as 'Widow of tanner' and 'Mariner's wife' have been ignored and treated here as having no occupation. However, there are two exceptions to this policy of discounting such statements. Firstly, there is one small category of this type of entry that is worthy of note and comment. A number of women reported their occupation as Collier's wife or Coal miner's wife.

These are summarised in the table below:

Sub-district	Wife of coal miner - numbers reported
Llanrhystud	5
Aberystwyth (rural)	2
Genau'r Glyn	19
Rheidol	10
Gwnnws	10

It is likely that these women had stayed at home, with their families, whilst their husbands moved, temporarily or permanently, from rural Ceredigion to the south Wales coalfield where there were better employment opportunities.

Benjamin^{8.26} confirms this is probably the case:

' . . . It was particularly noticeable from a study of the 1881 Census how a few men had even moved from Parcel Canol to the coal mining areas of south Wales while their families remained behind in the district. . . '

The wives concerned have been recorded as having no occupation in the present analysis. The second exception concerns farmers' wives and that is discussed later in this chapter.

8.26 Benjamin, E A, 1987. Parcel Canol, Cardiganshire: A study of the censuses 1841-81. *Ceredigion*, 10 (4) 383-391

8.5 Occupational status and gender

Comparisons have been made, elsewhere in this dissertation, using indicators derived from secondary data sources for Ceredigion and two other counties in Wales. John Williams has made some similar comparisons using census summary data for Glamorganshire and Ceredigion in order to contrast industrialised and rural areas. He observed that between 1851 and 1911 economic activity was dominated by two sectors. Agriculture provided employment for about thirty-five per cent of the total population of Wales with mining and quarrying accounting for a further seventeen per cent. He also points out that transport and building were dependent on these first two sectors. Therefore, in Wales as a whole, the employment pattern was dominated by primary productive industries^{8.27}.

Williams goes on to note that, from 1851 to 1911 there was an increase of seventy-one per cent in the number of occupied women. That compared with an increase of 109 per cent for men over the same period^{8.28}. He calculated that female employment grew in rural areas but fell in mining and industrial areas, especially in Glamorganshire and Monmouthshire. Williams suggests that the numbers of women employed in domestic service peaked in 1891 and that the general change from an agrarian to industrialised society was also having an effect on female employment. He reports that, in 1881, the proportion of women employed in domestic service in Wales was fifty-seven

8.27 Williams, J, 1995. *Was Wales Industrialised? Essays in Modern Welsh History*. Llandysul: Gomer Press, chapter 13, Occupations in Wales, 1851-1971, 289-291. ISBN 1859021395

8.28 *ibid*, 294

per cent, in Glamorganshire fifty-five per cent, and in Ceredigion fifty-one per cent. For agriculture the proportion of women employed in Wales was seven per cent, with two per cent in Glamorganshire, but seventeen per cent in Ceredigion^{8.29}.

Taking a lead from John Williams the numbers employed in these main sectors have been extracted from the 1891 census summary reports, for males and females aged ten years and over, for the registration counties of Ceredigion, Glamorganshire and Meirionnydd.

Figure 65, below, shows that Agriculture was the predominant occupation in Ceredigion but less so in Meirionnydd where slate quarrying was a major activity. Coal mining was, of course, the most significant employer of male

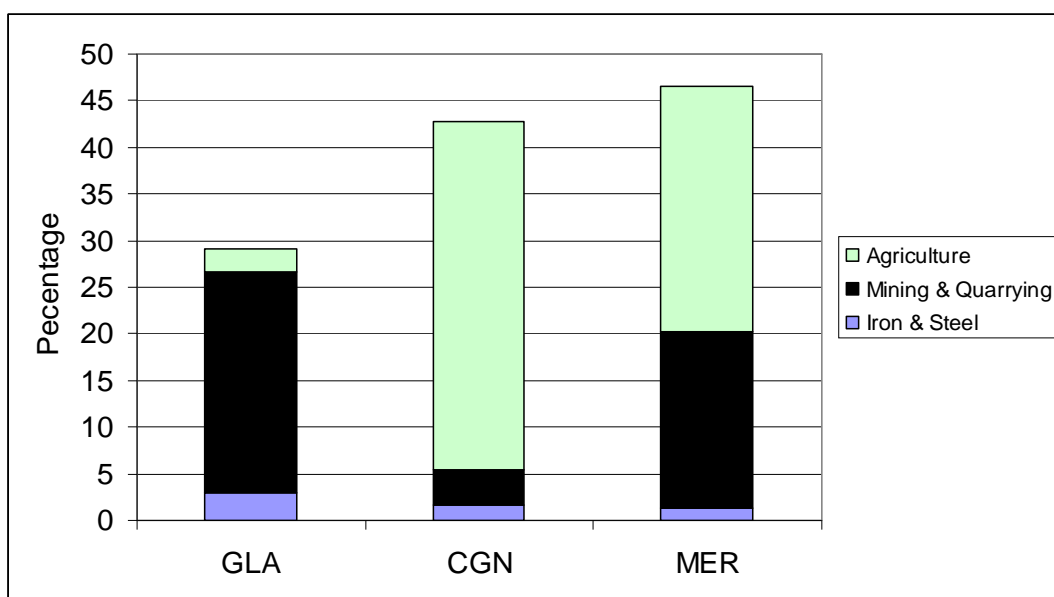


Figure 65 – Male employment in the Agricultural, Iron & Steel making, and Mining and Quarrying sectors in Glamorganshire, Ceredigion and Meirionnydd in 1891^{8.30}

8.29 Williams, J, 1995. *Was Wales Industrialised? Essays in Modern Welsh History*. Llandysul: Gomer Press, chapter 3, Women at work in nineteenth-century Wales, 65. ISBN 1859021395

8.30 Registrar-General, 1893. *Census of England and Wales 1891. Condition as to Marriage, Occupations, Birth-place and Infirmities*. London: HMSO, Volume 3, Table 7

labour in Glamorganshire.

Figure 66, below, shows the comparative proportions, as unweighted percentages, of females employed in the Agricultural, Indoor Domestic Service and Dress sectors in the three counties.

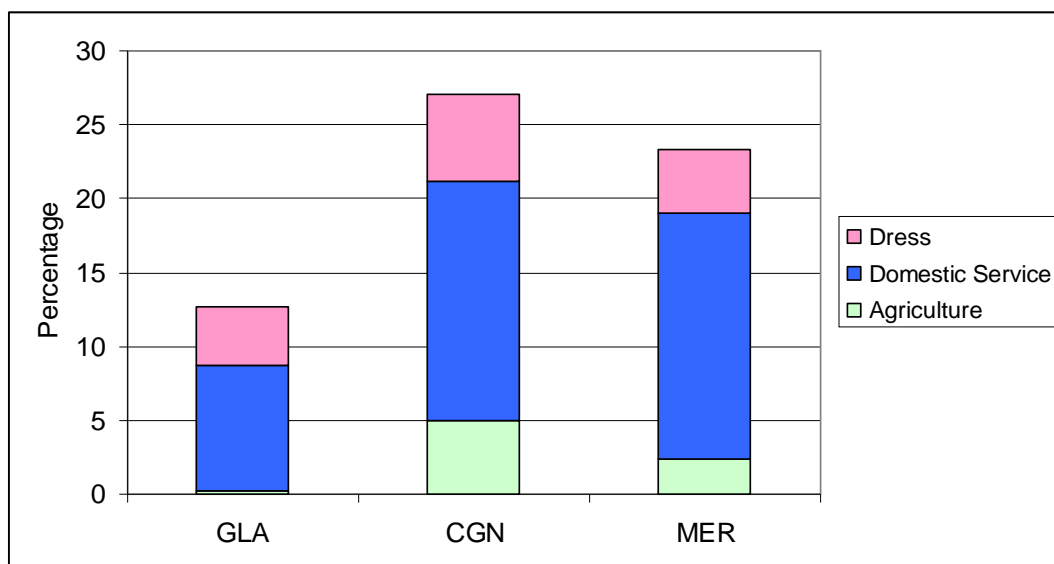


Figure 66 – Female employment in the Agricultural, Domestic Service and Dress sectors in Glamorganshire, Ceredigion and Meirionnydd in 1891^{8.30}

These values are for all females aged ten years and older and not only those who were economically active. Although it is not a complete picture of female employment this chart supports the assertion made by John Williams that more women were at work in rural areas than in the industrialised counties. It does not include, for example, the 2 294 subjects in Glamorganshire engaged in Washing and Bathing Service or the 968 Charwomen in Ceredigion. He refers to the proportion of subjects in the population aged ten years and older who are economically active and in paid employment as the 'participation rate'. Williams suggests that the lower female participation rate in Glamorganshire compared to the rural counties is associated with differences

in the proportions of married women and in the atypical industrial and social structure found in the coal mining valleys. He concedes that this topic is characterised by discrepancies and contradictions so that rational explanations are elusive^{8.31}.

For the present study Figure 67, below, shows the relative proportions (as percentages for each sub-district) of males aged 10 and more years, categorised as students and scholars, as in occupation or profession, and as having no occupation.

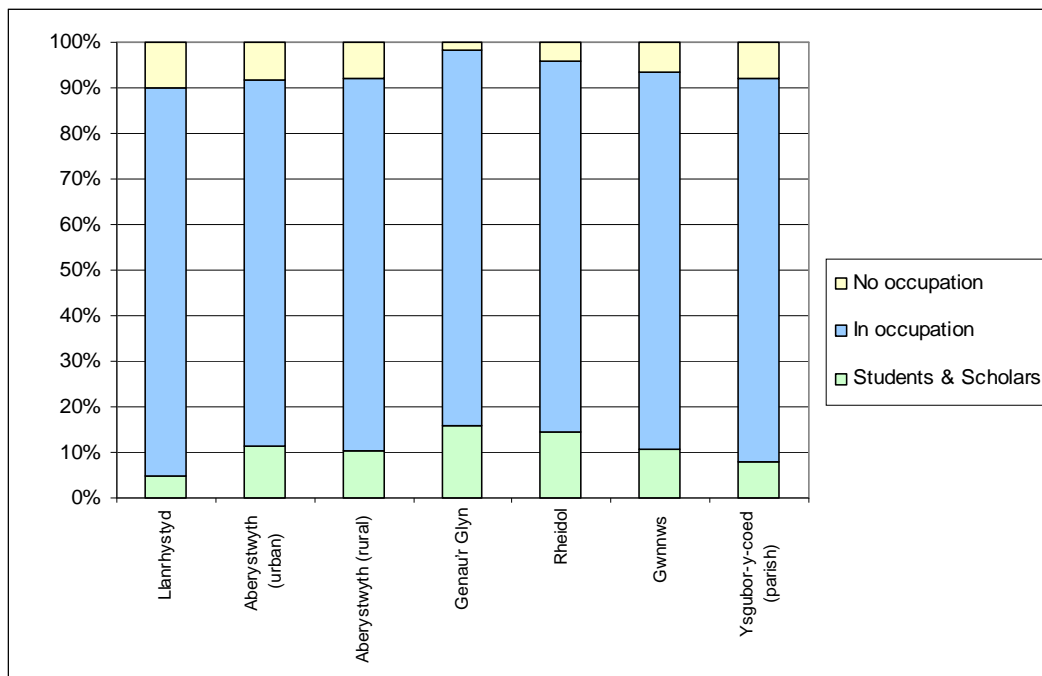


Figure 67 – Occupational status (percentage) of males aged 10 years and over.

Figure 68, below, shows the same measurements and criteria for females. It can be seen that males with occupations and professions accounted for some eighty per cent of subjects across the study area. By comparison, females

8.31 Williams, J, 1995. *Was Wales Industrialised? Essays in Modern Welsh History*. Llandysul: Gomer Press, chapter 3, Women at work in nineteenth-century Wales, 67-77. ISBN 1859021395

with occupations or professions accounted for less than forty-five per cent of subjects. This is a clear demonstration of the widely-held view that females in Victorian society were not recognised as active contributors to family income, even when in employment, plus the large proportion who were housewives at home.

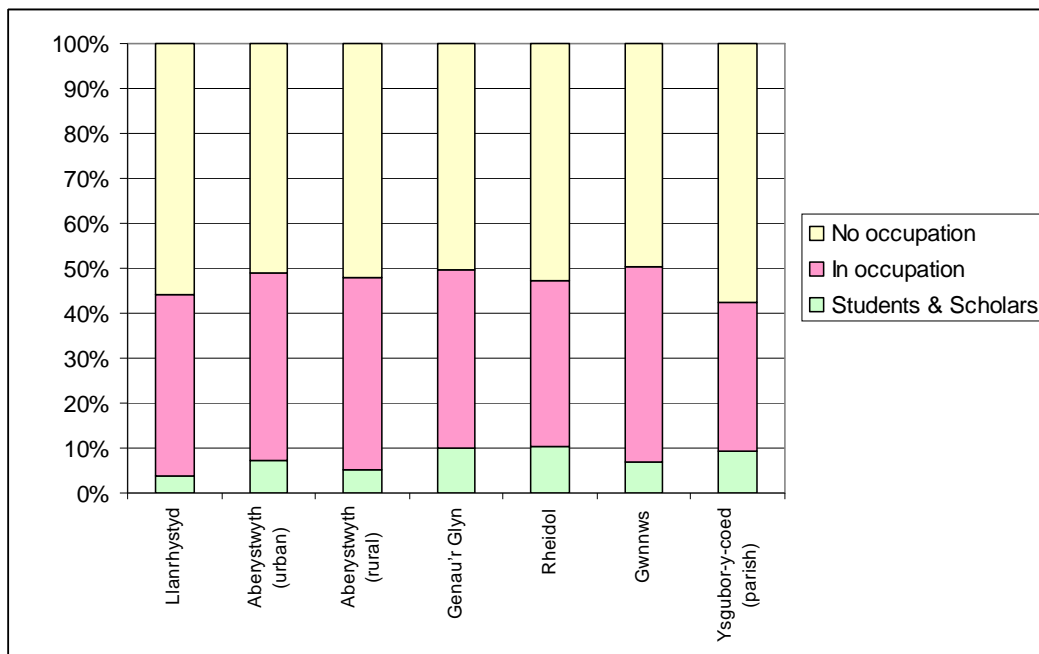


Figure 68 – Occupational status (percentage) of females aged 10 years and over.

8.6 Students and Scholars

The Booth classification recognises four specific types of students, all in the Public Service and Professional Sector: Law students; Medical students; Art Students (in the Art and amusement (painting) sector); Theological students. All students so identified were coded accordingly but then grouped with other uncoded students such as those identified as ‘Student (Science)’ or ‘Musical

Student', or, simply 'Student'. All categories of students were combined with the sub-totals derived for scholars. Across the whole of the study area there were 141 subjects described as students – 94 males, aged from 11 to 45 years, and 47 females, aged from 17 to 27 years. The majority of these (eighty-two per cent) were, unsurprisingly perhaps, located in Aberystwyth and Llanbadarn Fawr. Some students resident in the study area detailed their affiliations, for example - 'Classical Student (Lampeter College)'.

In the study area there were 1 065 male scholars and 1 023 female scholars. The ages of the male scholars ranged from 10 (the defined lower limit for the present study, of course) to 42 years; female scholars from 10 to 19 years. However, when the weighted arithmetic mean was calculated for both groups it was found to be identical, at 12.2 years. That simple calculation suggests there is no basis for thinking that there was any bias between the genders in terms of access to schooling. It is likely that the terms 'scholar' and 'student' were largely interchangeable. However, Higgs^{8.32} warns that census returns for children may be unreliable and suggests that the term 'scholar' may have been used to describe children who were employed in casual work at the expense of full-time education. It is suspected that the term 'scholar' was a very loose and imprecise one and probably included some who might be more correctly described as students. Similarly it is possible that some

8.32 Higgs, E, 1991. *Making Sense of the Census*. London: HMSO, 83-85. ISBN 0114402191

students were attending school rather college. Cooper^{8.33} makes the point:

‘ . . . scholars listed in the censuses could often include those who only attended a Sunday school. . . ’

It was also clear that significant numbers of young people of school age were not recorded as ‘Scholar’. It is estimated that for every four young people described as ‘Scholar’ there was one of comparable age for whom no description was provided; these have been counted as having no occupation in the present study.

8.7 Macro analysis of occupations

The modified Booth-Armstrong schedule for classifying occupations is appended at F.

Three enumeration sub-districts were selected to demonstrate the ability of the modified Booth hierarchical classification system to characterize the economic structure of a given locality. The three were Llanrhystud - a pastoral, agricultural area, Aberystwyth – an urban area, and Rheidol – an upland, agricultural and mining area.

8.7.1 Macro analysis of occupations in Llanrhystud registration sub-district

Kelly^{8.34} has described the main characteristics of the locality in 1895. The area is intersected by the rivers Ystwyth and Wyre; the soils are clay and

8.33 Cooper, K, 2009. Trefeurig, 1851-1891: a case study of a lead mining township. *Ceredigion*, 16 (1), 103

8.34 Kelly's *Directory of South Wales 1895*. London: Kelly & Co, 443, 447-448, 454, 377, 649

chalk (Rhostie), the crops are wheat (Llanrhystud), oats and barley with some pasture (Llangwryfon). There are grocers, drapers, tailors, blacksmiths, shoe makers and a saddler, with water mills at Pontfaen, Felinfawr, and Rhiwbwys. Figure 69, below, shows the occupational and professional sectors of all males in Llanrhystud sub-district. It may be seen that the overwhelming majority was involved in Agriculture with smaller numbers engaged in Manufacture, Building and Dealing. The six remaining occupational sectors accounted for an aggregate ten per cent of subjects.

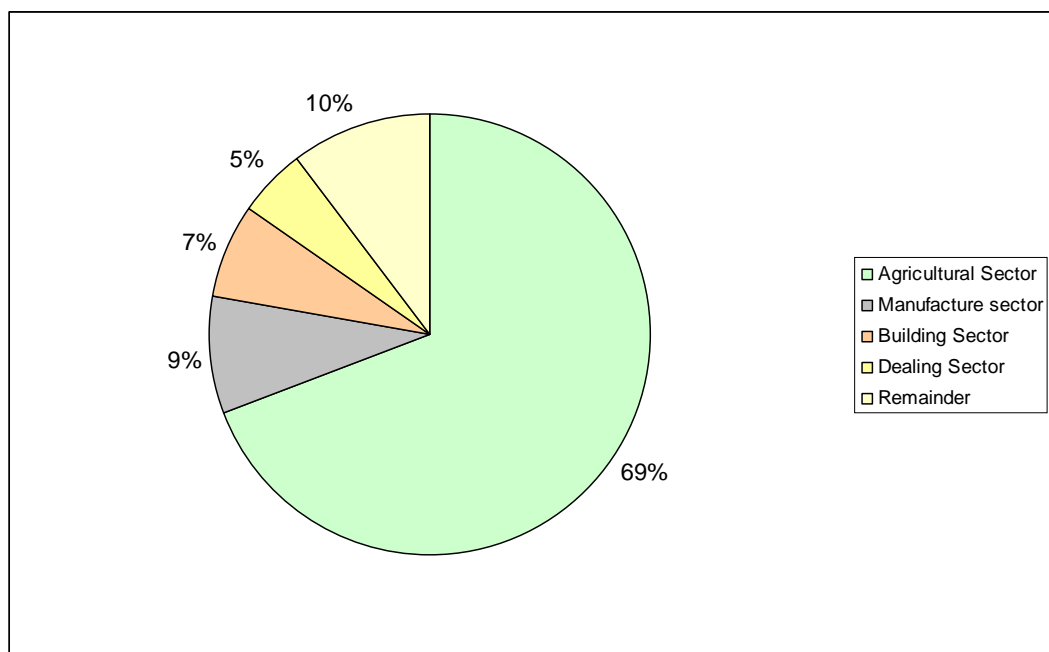


Figure 69 – Occupational sectors for males in Llanrhystud registration sub-district

Figure 70, below, shows the occupational and professional sectors for females in Llanrhystud sub-district. It may be seen that three-quarters of all economically active women were engaged in Domestic Service together with Agriculture. These two sectors, together with Manufacture and Property owners accounted for ninety-three per cent of female occupations.

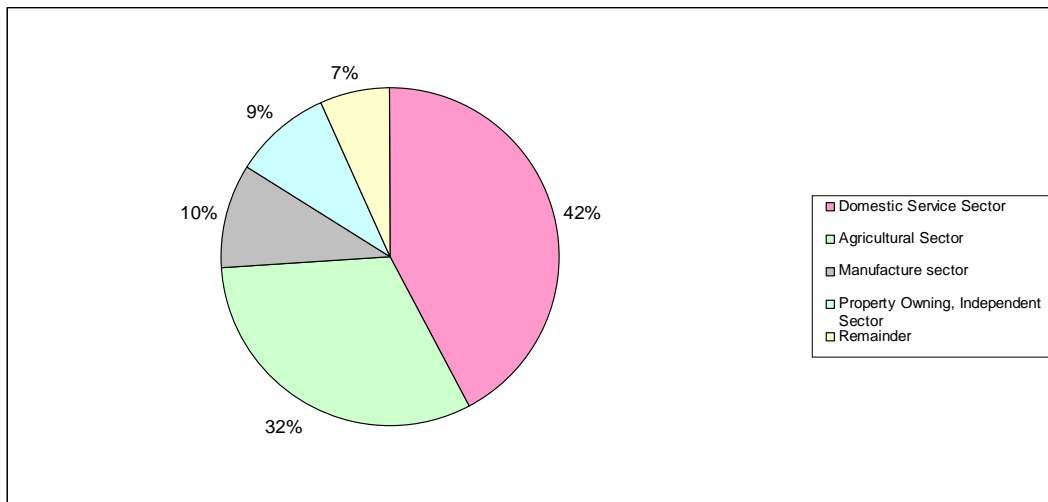


Figure 70 – Occupational sectors for females in Llanrhystud registration sub-district

8.7.2 Macro analysis of occupations in Aberystwyth Urban registration sub-district.

Kelly's Directory of 1895^{8.35} provides a detailed and fulsome description of Aberystwyth as a bathing resort and watering place located at the confluence of the rivers Rheidol and Ystwyth. Rail and road connections are highlighted together with the attractions of the district most likely to appeal to tourists. The lack of a sandy beach is mentioned, with the reader being recommended to try Borth instead. There were bathing machines for ladies opposite Marine Terrace, and for gentlemen, near the rocks at Bryn-diodde; probably near the present bandstand. The attention of visitors was drawn to the semi-precious stones to be found on the beach and to the 'many' lapidaries in the town who prepared and polished these stones. There is an account of churches and places of worship together with other public buildings. There was a general

8.35 *Kelly's Directory of South Wales 1895*. London: Kelly & Co, 55-69

market twice-weekly with a cattle fair on the first Monday of every month. Horse and cattle fairs were held in May and September with the hiring fair in November when farmers could hire farm servants. Mention is made of the branches of three banks, George Green's engineering works, two iron foundries, three enamelled slate works, a tannery and a brewery. The principal hotels are listed.

There is a detailed description of the University College, tracing the history from its founding in 1872. The names of the Court of Governors include many of the great and good across a wide section of Welsh society, including John and Richard Cory of Cardiff, Rev Dr Thomas Charles Edwards of Bala, Thomas Gee of Denbigh, Miss A H Jones, Ashford Welsh Girls School, Lord Lisburne of Trawscoed, Miss Sarah Jane Rees (*Cranogwen*), Llangrannog, and Sir Watkin Williams Wynn, Rhiwabon. The subjects offered included Hebrew, Arabic, Syriac and Sanskrit (Prof Ethé) and Agricultural Chemistry (Mr J A Murray).

Kelly also lists local postal services, county and borough magistrates, members of the Corporation, police and fire service, medical services, registrars of births, deaths and marriages, the Union Workhouse, schools, local newspapers, carriers, and a range of local businesses and enterprises from the Aberystwyth & Aberdovey Steam Packet Co Ltd, the Belle Vue Hotel, Stead & Simpson, boot makers, to Young, W A, traffic manager, Manchester & Milford Railway Co.

Figure 71, below, shows the occupational and professional sectors for males in Aberystwyth Urban sub-district. It can be seen that there is a fairly even

distribution between the different sectors, reflecting the more balanced economic structure of the town, compared to Llanrhystud sub-district. Men employed or active in six of the eleven sectors accounted for eighty-eight per cent of the total.

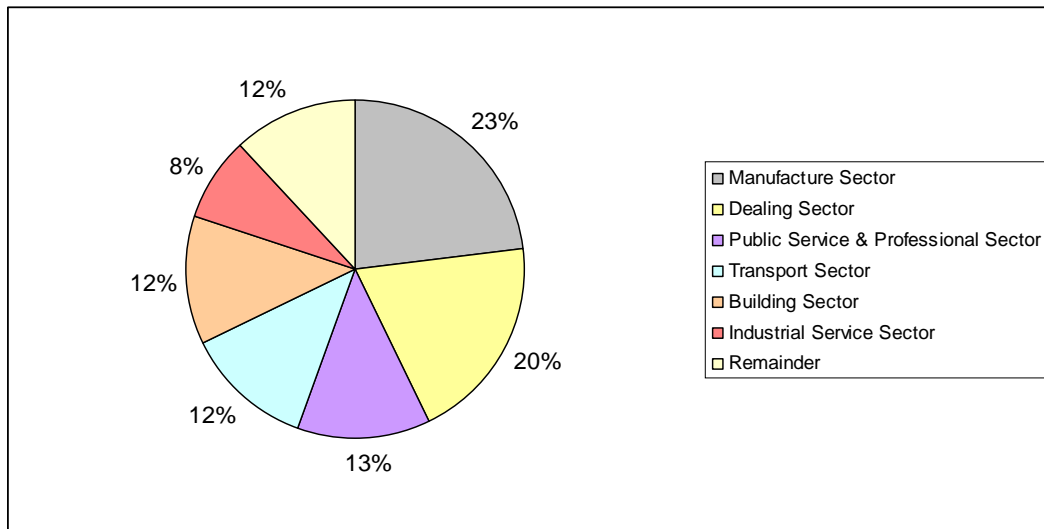


Figure 71 – Occupational sectors for males in Aberystwyth Urban registration sub-district

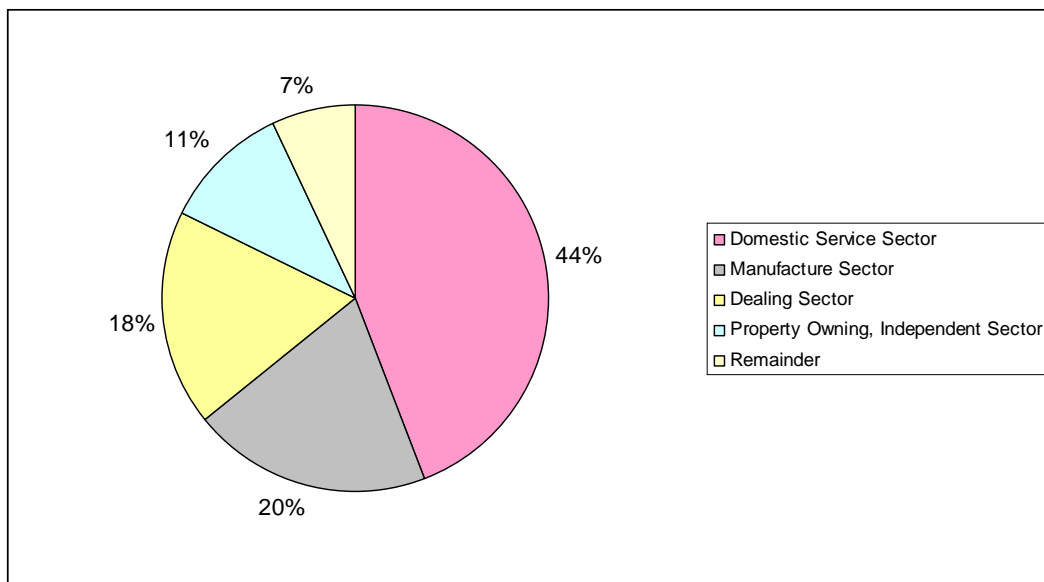


Figure 72 – Occupational sectors for females in Aberystwyth Urban registration sub-district

Figure 72, above, provides an insight into the employment of women in the town. The structure is, again, dominated by women in domestic service with an equal number involved in manufacture and dealing. There is a significant number (eleven per cent) in the property owning, independent sector, suggesting that ladies of leisure found the ambience of the town to their liking.

8.7.3 Macro analysis of occupations in Rheidol registration sub-district,

In 1895 Kelly^{8.36} describes an area characterised by clay and loam soils, gravel deposits, subsoil of shale with pastureland and oats, barley, roots and timber being grown. The area is defined by the rivers Rheidol and Ystwyth.

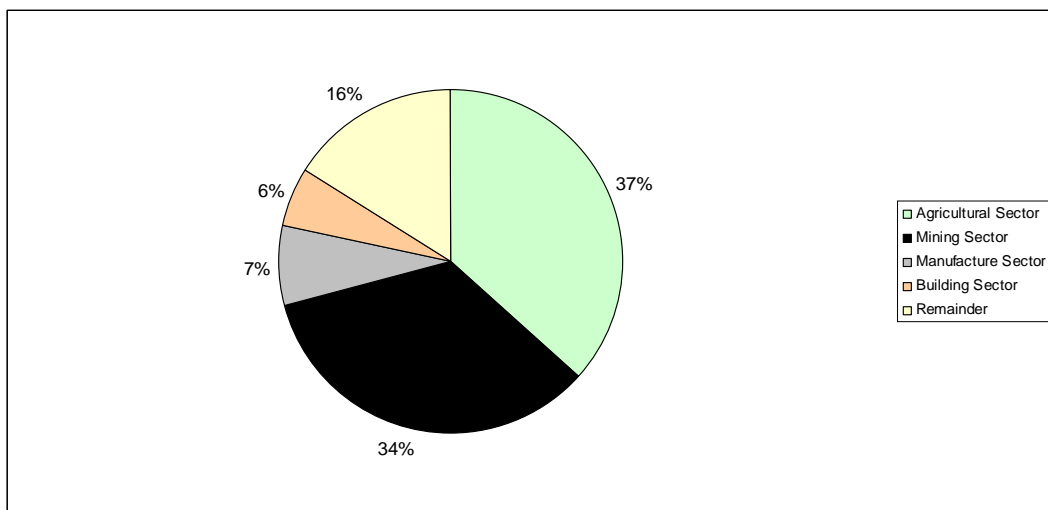


Figure 73 - Occupational sectors for males in Rheidol registration sub-district

Commercial enterprises included a butcher, lead mines at Trefeurig, grocers, a tailor, saw mills, water mills at Cwmydion and Tanllan, a blacksmith, boot and shoe makers, woollen manufacturers at Melindwr, and a wheelwright.

8.36 *ibid*, 361, 364, 424, 496-497, 790

From Figure 73, above, it may be seen that male employment across the Rheidol sub-district is dominated by agriculture and mining, principally lead mining. Although that industry had long been in decline it was still a major source of employment in the area, at least in relative terms. As with the areas of Llanrhystud and Aberystwyth Urban, female occupations in Rheidol sub-district were distinctively and markedly different from those of males.

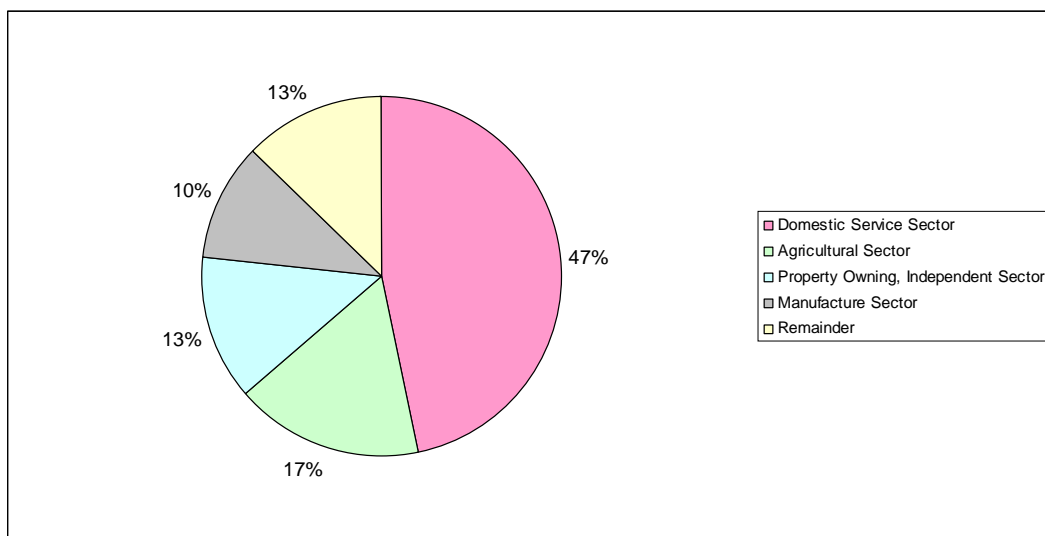


Figure 74 - Occupational sectors for females in Rheidol registration sub-district

Figure 74, above, shows that almost half of the female population was employed in the domestic services sector, followed by agriculture, and then by property owners and those of independent means.

These comparative analyses confirm that in the pastoral region around Llanrhystud the dominant employment for men was in agriculture. In Aberystwyth there was no particularly dominant employment sector and agriculture was quite insignificant. In this urban area there was wide diversity of employment with over three-quarters of economically active men engaged in five major sectors – manufacturing, dealing, public and professional

services, transport and building. This confirms the status of the town as a regional centre for services and with a diverse economic base. Despite the marked decline in lead-mining in the Rheidol area, detailed elsewhere in this study, that industry employed a similar number of men to agriculture. These two activities, taken together, accounted for some seventy per cent of male employment. Of course where men were involved in both sectors on a paid basis, as opposed to part-time smallholders in their own right, it is not possible to determine, from the census returns, which activity had first call on their time.

It is clear that employment opportunities for women were more restricted than for men. In the Llanrhystud locality three-quarters of working females were employed in domestic service along with agriculture. In Aberystwyth town some forty-four per cent of working women were engaged in the domestic service sector. That is not surprising though the value of twenty per cent for the proportion of working women employed in the manufacturing sector is rather more interesting. In a study of a community with a population of some 29 000, Armstrong found that, applying the criteria set down by Booth, 1 530 females were employed in manufacturing; this amounted to forty per cent of working women compared with 1 630 or forty-three per cent engaged in domestic service^{8.37}. The subject of the Armstrong study was the city of York. It is, of course, possible to speculate that a number of the fifteen hundred women employed in manufacturing worked at the Rowntree's chocolate

8.37 Armstrong, W A, 1972. The use of information about occupation. *In: Wrigley, E A, ed. Nineteenth-century society. Essays in the use of quantitative methods for the study of social data.* Cambridge: University Press, 246. ISBN 0521084121

factory. By the end of the nineteenth century it was one of Britain's largest manufacturing employers. The employment pattern for females in the Rheidol sub-district was broadly similar to the situation in Llanrhystud with forty-seven per cent engaged in agriculture (forty-two per cent in Llanrhystud), followed by seventeen per cent employed in agriculture (thirty two per cent in the more pastoral area of Llanrhystud).

8.8 Micro analysis of occupations across the study area

The previous section of this chapter looked at the dominant occupational sectors in three different localities. That comparative analysis demonstrated how the nature of employment reflected the economic structure of the locality. For example, the dominant proportions of males in agriculture in Llanrhystud, of females in domestic service in Aberystwyth town, and of males engaged in mining in Rheidol clearly reflected the different demands for those categories of labour in those areas. It has already been shown that the mining industry was almost at the end of its life by 1891 but agriculture continued to be a major economic activity well into the twentieth century. Madgwick^{8.38} reports that as late as 1966 more people were engaged in agriculture (twenty-seven per cent) than in any other occupation. This next part of the study aims to examine the major occupational sectors in greater detail across the study area; it is as much descriptive as it is analytical. However, unlike some other

8.38 Madgwick, P J, 1973. *The Politics of Rural Wales: a Study of Cardiganshire*. London: Hutchinson. ISBN 0091161703 22

studies, where selected and possibly unrepresentative examples have been cited to support arguments, references to individuals, families and statistically unrepresentative groups are for illustration only.

8.8.1 Agricultural sector occupations

There were 2 346 males occupied in Agriculture, accounting for eighty per cent of the total workforce within that sector for the study area. The youngest was probably Morgan Morgans, age 11, Farm Servant of Llanrhystud whilst the eldest was John Rice, age 92, Retired Farmer of Cynill Mawr. There were 576 females in this sector, ranging from Elizabeth Morris, age 10, Farmer's Daughter of Llanilar through to Mrs Ann Owen, age 87, Retired Farmer of Llanbadarn Fawr.

Farmers, graziers

Armstrong^{8.39} has a note 'The problem of farmers'. By that he means the census returns for agricultural communities were likely to be ambiguous and open to different interpretations. He especially questions the definition of a farm and suggests it should mean a holding of five acres or more. Up to 1881 census returns included a statement of the acreage of a holding and the numbers of labourers employed on each holding. By 1891 that practice had been abandoned^{8.40}. Mills describes a study prompted by a perception that

8.39 Armstrong, W A, 1972. The use of information about occupation. *In: Wrigley, E A, ed. Nineteenth-century society. Essays in the use of quantitative methods for the study of social data.* Cambridge: University Press, 225. ISBN 0521084121

8.40 Higgs, E, 1991. *Making Sense of the Census.* London: HMSO, 87. ISBN 0114402191;

Mills, D R, 1999. Trouble with farms at the Census Office: an evaluation of farm statistics from the censuses of 1851-1881 in England and Wales. *Agricultural History Review*, 47 (1), 58-77

that the Census Office had reservations about the credibility of collected farm data and explains why an empirical approach produced inconsistent results. The present study area accounted for 925 males treated as farmers and graziers; thirty-seven were retired. Many farmers had other occupations, some sixty or so reporting that they had secondary or tertiary interests ranging from lead miner to master mariner. Five of the sixty were non-conformist ministers and preachers. Many of the secondary occupations were clearly complimentary activities to farming, such as corn milling.

Of course, the term 'Farmer' could refer to a person with a holding of 100 acres employing a number of labourers and servants in addition to his, or her, own family members. Or the term might be used by a man with five acres, whose 'day job' could be lead miner or platelayer, keeping a cow and a pig whilst his wife cared for the chickens. Up to and including the census of 1881 the term 'Farmer' was normally qualified by the reporting of further information. For example, in 1891, Daniel Morris, single, age 50, is farming Ffos-y-bontbren, Llanilar, (RG12/4557 f4 p2 sch6) assisted by his unmarried brother, Evan, age 54, cited as 'Farmer's Assistant', and their unmarried sister, Sarah, age 56, cited as 'Dairymaid'. Additional labour on the farm was provided by Jacob Evans, age 19, and David Jones, age 14, both general servants. There was also a domestic servant, Hannah Jones, age 19. The entry for this same family at the same farm in the 1881 census (RG11/5444 f3 p2 sch6) has Daniel Morris, age 36: 'Farmer of 121 acers (*sic*) employing 1 lab.' Other members of the household included John Morris, age 52, single – 'Farmer's brother', Evan Morris, single, age 40, also 'Farmer's Brother', and

Sarah Morris, single, age 43, 'Farmer's Sister'. Also enumerated at the farm are Elizabeth Roberts, age 21, 'General Servant Domestic', David Jones, single, age 18, 'Farm Servant Indoor', and David Jenkins, single, age 15, 'Farm Servant Indoor'.

There were 209 females in the farming sector - 179 were described as 'Farmer', sixteen as 'Retired', and fourteen as 'Smallholder' or 'Small farmer'. Some simple arithmetic comparisons can be made between male and female subjects in this sub-sector:

	Weighted Mean Age yrs	Single %	Married %	Widowed %
Male Farmers	50	19	69	12
Female Farmers	54	20	8	72

Female farmers tended to be slightly older than males with eighty per cent of both genders currently married or widowed. Seventy per cent of male farmers were married but seventy per cent of female farmers were widows. Clearly these widows were running the farms previously worked by their late husbands. In general, those who described themselves as farmers tended to be middle-aged rather than being in their twenties or thirties.

Farmers' sons, grandsons, brother, nephews

This sub-section was originally perceived as covering family members of both genders together with spouses but this is not so. Previously, in this present chapter, it has been suggested that where a woman reports her occupation as 'wife of' that information should be ignored. The one rational exception is that of 'Farmer's wife', or other female (or male) member of a farming family. These farming family members were economically active

contributors within a business unit so the terminology that applies in these cases almost certainly has meaning over and above familial relationships. The sub-heading AG01.03 covers male relatives of the farmer; the farmer could, of course, be male or female. Sons are recognised but not daughters, or wives. Higgs^{8.41} confirms that a policy decision was made to exclude or de-recognise female family members:

‘ . This gradual exclusion of women was taken a stage further in 1891 when householders were instructed to return only ‘sons or other relatives of farmers employed on the farm . . . as “Farmer’s son”, “Farmer’s brother”. The daughters of farmers were no longer mentioned. . . .’

John Williams has also remarked upon this dilemma, pointing out that, for farming households, it was difficult to distinguish between those employed on the farm and those helping in the farmhouse^{8.42}. He also highlights the issue

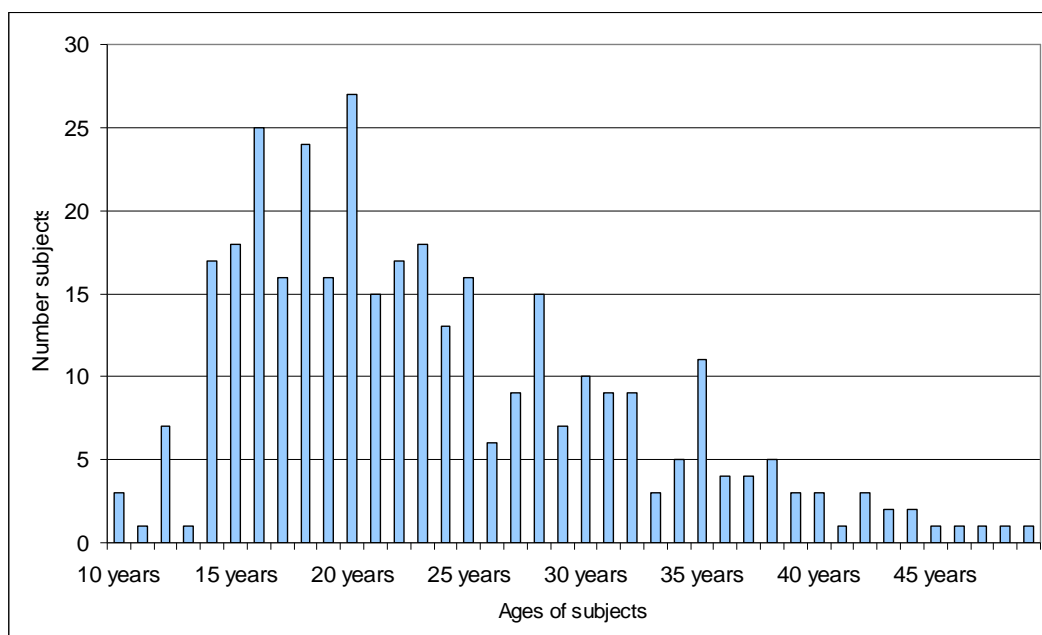


Figure 75 – Farmer's sons – age distribution

8.41 Higgs, E, 1991. *Making Sense of the Census*. London: HMSO, 87. ISBN 0114402191
 8.42 Williams, J, 1995. *Was Wales Industrialised? Essays in Modern Welsh History*. Llandysul: Gomer Press, chapter 13, Occupations in Wales, 1851-1971, 287. ISBN 1859021395

of female family farm workers being under-recorded in the census returns after 1881. There were 350 subjects in the study area identified as 'Farmers Son' with a further eleven identified as brother or grandson or nephew. None of these subjects were ranked as 'Servant'. The weighted mean age of these farmer's sons was twenty-four years. Figure 75, above, shows the age distribution for farmer's sons; the number is seen to decline from a maximum in their early twenties. This suggests that they may have left the area, moved to a different occupation, or become farmers in their own right. Of the 350 farmer's sons in the study area, only five were married; there was one widower. This high proportion of single men implies that they left the family holding at the time of their marriage.

It has already been shown that women constituted twenty per cent of the reported agricultural labour force. This confirms the observations of Moore-Colyer^{8.43}:

... the declining role of women on the land. Women had traditionally been employed as day labourers during the growing and harvesting seasons, but as cereal acreages decreased so did the importance of field work, so what remained became the prerogative of permanent farm staff. ... The Census Returns reveal a decline in the female agricultural labour force in Wales from some 27 per cent of the population in 1851 to slightly over 9 per cent in 1911, although it is significant that in the counties of Cardigan, Carmarthen and Pembroke where increasing emphasis was laid on farmhouse dairying, employment of women on the land remained in excess of 20 per cent.'

This change in female agricultural employment is confirmed by John Williams who notes that the proportion (as a percentage of the total in work) of women employed in agriculture was seven per cent in Wales in 1881, falling to four

8.43 Moore-Colyer, R, 2000. Farming regions G Wales. *In*: Brassley, P and Mingay, G E, eds. *The agrarian history of England and Wales Volume 7 Part 1 1850-1914*. Cambridge: University Press, 430. ISBN 052329264

percent in 1901. The values for Ceredigion were seventeen per cent in 1881, falling falling to nine per cent in 1901^{8.44}.

In the study area 263 female family members were identified within farming households. There were 243 farmer's daughters, two granddaughters, three nieces, seven sisters, one sister-in-law, two step-daughters, four farmer's wives and one visitor. The very low number of farmer's wives confirms the view, prevailing at the time, that they were economically 'invisible'. Of the 247 farmer's daughters, granddaughters and step-daughters three were married and two were widows. The weighted mean age of these subjects was twenty-two, slightly younger than their brothers. Clearly, the instruction issued in 1891 to include sons of farmers but exclude daughters was, to a degree, ignored. Figure 76, below, shows the age distribution for farmer's daughters.

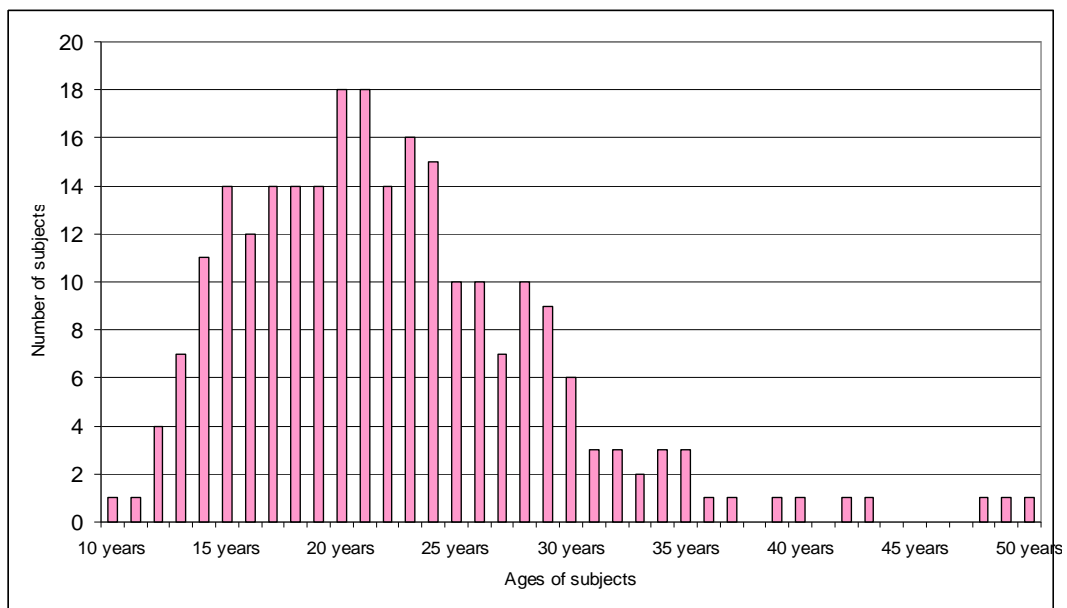


Figure 76 – Farmer's daughters – age distribution

8.44 Williams, J, 1995. *Was Wales Industrialised? Essays in Modern Welsh History*. Llandysul: Gomer Press, chapter 3, Women at work in nineteenth-century Wales, 65. ISBN 1859021395

This chart is geometrically similar to the chart for their brothers. Again, the high proportion of single women amongst those still at home suggests that they may have left the family holding at the time of their marriage. Whilst it is possible that some daughters may have married the sons of other farmers and others may have moved into domestic service, it is also known that there were seasonal and temporary work opportunities for young women prepared to leave home. Williams-Davies^{8.45} gives an account of women from Ceredigion working for soft-fruit growers in the London area. Benbough-Jackson^{8.46} notes that, in earlier times, women from Ceredigion walked to London in five days to take on casual work weeding public parks.

Agricultural labourers, farm servants

David Jenkins^{8.47} explains that, in Wales, there was a distinction made between a farm labourer and a farm servant. He suggests that, as a general rule, farm servants were usually young unmarried men who were engaged by the farmer to work, principally, with horses and who lived-in at the farm. Agricultural labourers were often married and lived in their own cottages off the farm. The labourers did the general labouring work, such as hedging, ditching and drainage tasks. The farm servant usually became a farm labourer when he married and set up home with his new wife. When farm servants or labourers were older and less able to undertake the heavier manual work around the farm they might become cowmen. Milking was seen

8.45 Williams-Davies, J, 1978. 'Merched y gerddi' – mudwyr tymhorol o Geredigion. *Ceredigion*, 8 (3) 291-303

8.46 Benbough-Jackson, M, 2007. *Cardiganshire: A concise history*. Cardiff: University of Wales Press, 115. ISBN 9780708321119

8.47 Jenkins, D, 1971. *The Agricultural Community in South-West Wales at the turn of the Twentieth Century*. Cardiff: University of Wales Press, 77, 82. ISBN 090076872X

as 'women's work' and would be undertaken by men only as a last resort. A farm servant of some long-standing might have an elevated social status within the farm household, almost the equivalent of a son of the master. Farm servants were normally recruited at hiring fairs held each November. The sons of the farmer did the same work as the farm servants and might share the same living accommodation and meals. A son visiting another farm would have a certain social status and would be entertained in the 'best kitchen' as opposed to the 'back kitchen'.

D W Howell^{8.48} also confirms that, whilst the sons of farmers would be expected to undertake the same classes of work as hired servants and farm labourers, they were accorded a particular standing by other farmers. The children of farmers would be eligible to marry the sons and daughters of other farmers but farm labourers could marry only general domestic servants and female farm servants. Howell, while maintaining that society was not defined by social class, compared this structure, based on rank and status, to a caste system. Howell suggests that as small farmers and their labourers were so similar in terms of lifestyle and wealth (or lack of it) this area of Welsh agricultural society displayed no class structure. The sons of farmers often worked as labourers on neighbouring holdings. Agricultural labourers were able, given the minimal amount of capital required, to aspire to tenancies in their own right. Jenkins^{8.49} states that the children of farmers married relatively late – at the average age of thirty-two for sons and at the average

8.48 Howell, D W, 1987. *Land and people in nineteenth-century Wales*. London: Routledge & Kegan Paul, 93. ISBN 0710086733

8.49 Jenkins, D, 1971. *The Agricultural Community in South-West Wales at the turn of the Twentieth Century*. Cardiff: University of Wales Press, 77. ISBN 090076872X

age of twenty-eight for daughters.

Madgwick^{8.50}, referring to farming in Ceredigion in 1966, notes that:

'Much of the land is of poor quality and is used for stock rearing. Most farms are small, except for some mountain sheep farms, and there is little scope for the employment of labour. The typical Cardiganshire farmer is an owner-occupier, working himself with help from his immediate family.'

That comment implies that little had changed between 1891 and 1966. Of course, in reality, the farming industry and the agricultural landscape had changed beyond recognition by the early part of the twentieth century.

Figure 2, in section 1.2.2, above, compared agricultural holdings by size for Ceredigion and for Wales in 1885. Between 1885 and 1966 the number of holdings was reduced by about one-quarter and there was a shift away from

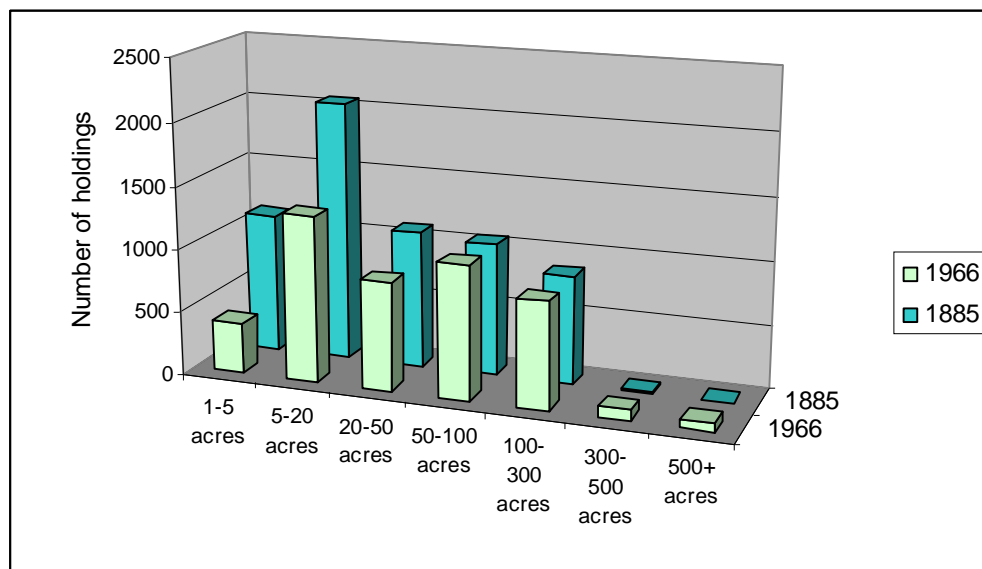


Figure 77 – Comparison of numbers of holdings in Ceredigion, by size, between 1885 and 1966^{8.51}

8.50 Madgwick, P J, 1973. *The Politics of Rural Wales: a Study of Cardiganshire*. London: Hutchinson, 168. ISBN 0091161703 22

8.51 Llywodraeth Cymru/Welsh Government, 1985. Digest of Welsh Historical Statistics 1700-1974 Tables 4.8d. Available from <http://wales.gov.uk/topics/statistics/publications/dwhs1700-1974/?lang=en> [Accessed 6 Jul 2011]

the numbers of smaller holdings below the 50 to 10 acres band. This is shown in Figure 77, above.

Gerald Morgan has described how, after the First World War, much marginal land in the north and east of Ceredigion was given over to conifer plantations. That change in land use was to be seen across much of upland Britain. Increased mechanization had reduced the demand for hired labour and ancillary activities such as blacksmithing had virtually disappeared^{8.52}.

In late Victorian Wales women were employed on farms for indoor, domestic duties or in the dairy milking and butter making. Liquid milk was not usually sold but made into salted butter. Female labour was employed in the fields on a casual basis but only at harvest time.

There were 871 male farm servants and agricultural labourers in the study area. No attempt has been made to differentiate between servants and labourers or between indoor servants and those living in their own cottages. No attempt has been made to treat these subjects as separate groups because it is felt that the entries in the enumerators' returns are too imprecise to permit of any meaningful analysis. Indeed, Higgs^{8.53} implies that the requirement, in earlier census years, to distinguish between servants sleeping in the farmer's house and out-door labourers had been diluted by 1891. There were sixty-seven female farm servants and labourers.

8.52 Morgan, G, 2006. *Ceredigion: a Wealth of History*. Llandysul: Gomer Press, 161-168. ISBN 1843235013

8.53 Higgs, E, 1991. *Making Sense of the Census*. London: HMSO, 87. ISBN 0114402191

8.8.2 Mining sector occupations

In addition to mining, this sector included quarrying, brick-making and salt and waterworks; 980 subjects were recorded in the sector. Figure 78, below, shows the distribution of subjects between lead mining, coal mining and quarrying. Eighty-one coalminers were found, all male. There were ten who were married, three widowers and the weighted mean age was twenty-four

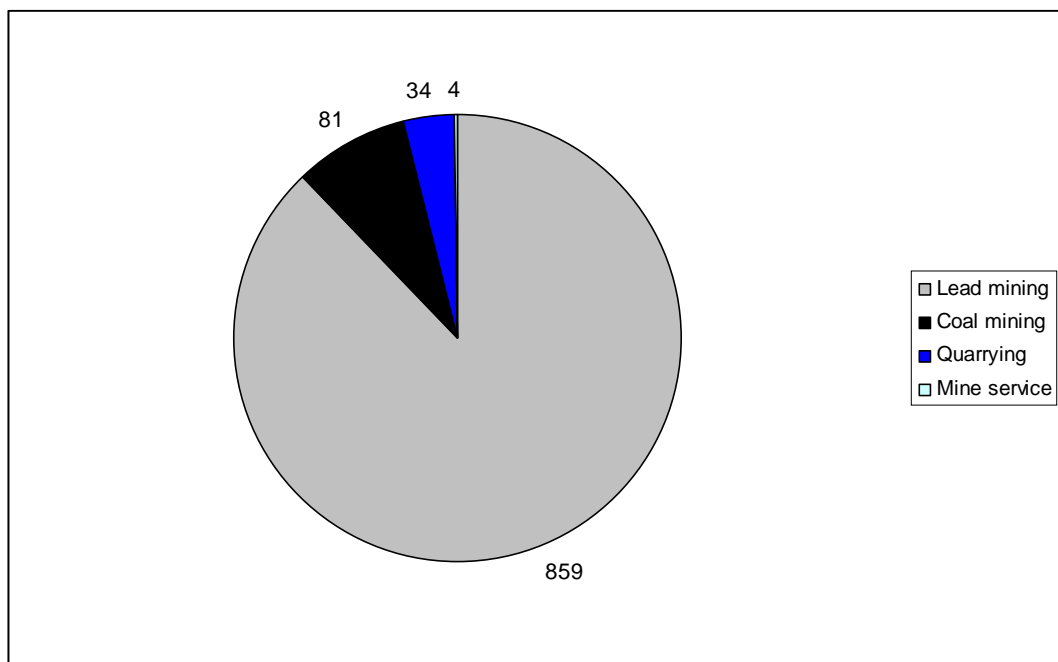


Figure 78 – Numbers of subjects across the mining and quarrying sector

years. Of the eighty-one subjects, fifty-three were enumerated in Aberystwyth town, they had a weighted mean age of twenty-one, and all, except two, were young, single men. Furthermore, fifty of the fifty-three were described as boarders, lodgers or visitors, and, of those, thirty-three were natives of Glamorganshire, and, in particular of Aberdare and the Rhondda valleys. It would appear that these young miners were staying together in lodging- and

guest-houses, in groups of four or five. It is reasonable to assume that they had money to spend and were early examples of working-class tourists able to travel to Aberystwyth via the rail connection from south Wales through Carmarthen. There were twenty-eight coal miners residing at locations outside Aberystwyth, especially in Cwmrheidol, Melindwr and Trefeurig; twenty-five of these had family connections, being described as 'Head' or 'Son'. Again, it is reasonable to surmise that this sub-group was comprised of former lead miners who had moved to the south Wales coalfield for work with better pay, and who had returned home to visit family.

Of the 859 subjects associated with the lead mining industry, thirty-nine were women, mainly employed in ore dressing and washing. Widow Mrs Jane Thomas, age fifty-five, was an office cleaner. The number of subjects employed in lead mining is statistically significant. That, together with the details of their occupations (for example: mine agent, lead ore dresser, etc) revealed in the census returns means a further analysis has been possible by

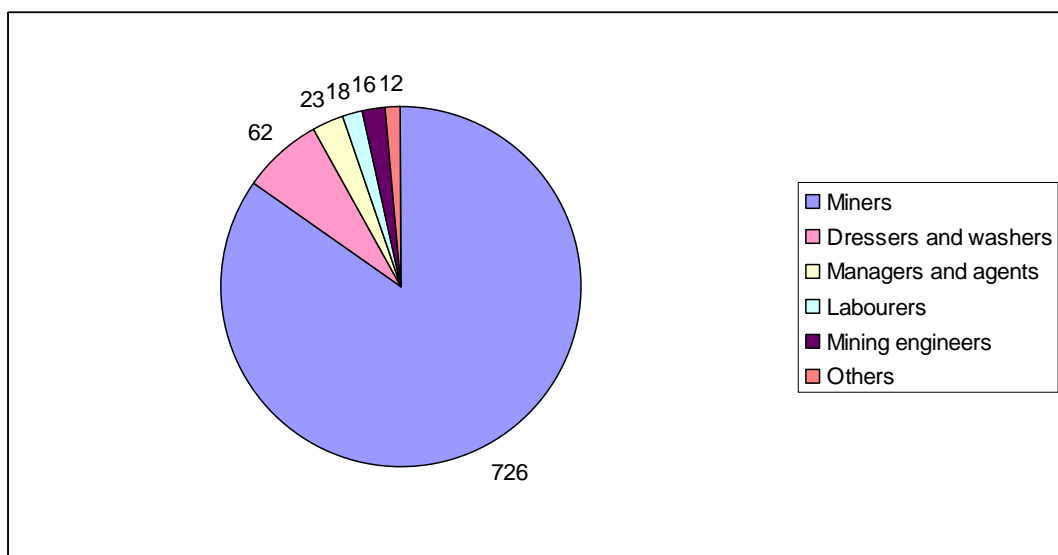


Figure 79 – Combined male and female occupations in lead mining

drilling down below the classification permitted by Booth. Figure 79, above, attempts a breakdown by class of employment and skills; both men and women are included. The result shows that those designated, simply, as miners are predominant with significant numbers recorded in ore washing and dressing followed by supervisors, labourers and engineers. It is possible to show where those engaged in lead mining were living. Figure 80, below confirms that around seventy per cent of miners were concentrated in just five parishes – Llanfihangel-y-Creuddyn, Ysbyty Ystwyth, Cwmrheidol, Trefeurig and Melindwr (see Figures 12 and 13). Where the mines were located in

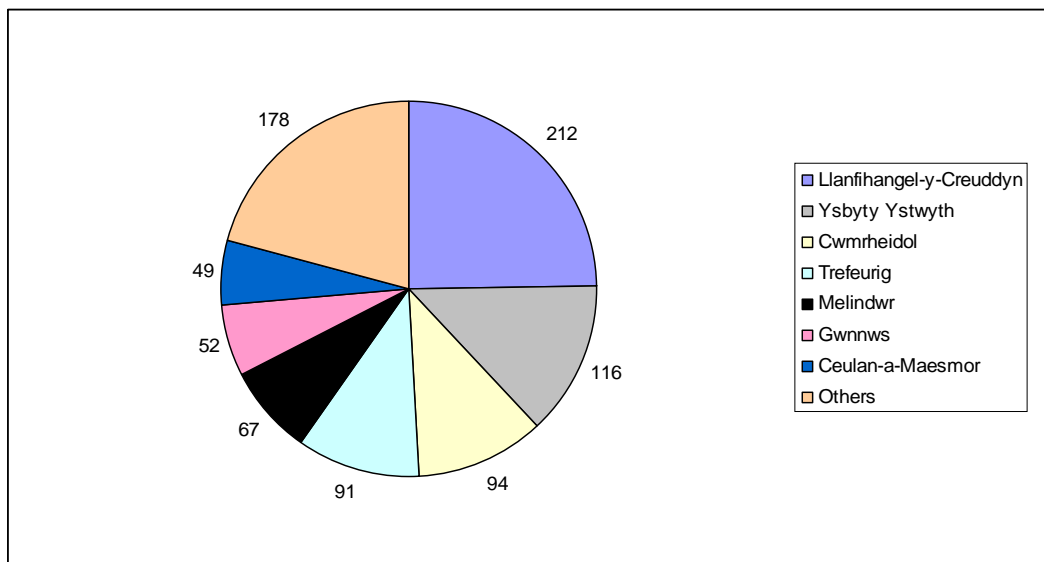


Figure 80 – Parishes of residence of lead miners

remote areas the miners would walk to work at the start of the week taking their provisions with them, and stay in barracks until returning home on the Saturday.

The quarrying sub-sector covers both stone and slate quarrying, and also includes stone and slate cutters and polishers. There were thirty-four subjects connected with this activity; ten were working with slate as polishers. It is

probable that those working with stone were using materials quarried within the area. There was a slate quarry at Tyn-y-garth, near Taliesin in the parish of Ysgubor-y-coed but slate was probably imported from north Wales by sea and, later, rail. It is possible that the slate polishers, who generally lived in Aberystwyth and Llanbadarn were employed in the slate enamelling works; this is discussed later in this chapter.

8.8.3 Building sector occupations

This sector is sub-divided into Management, including architects, civil engineers and surveyors, Operatives, including masons, painters and plumbers, carpenters and joiners and gasfitters, and Roadmaking, including road labourers and railway labourers. There are 578 subjects in the Building sector, all being male. Gasfitters are specifically recognised but it seems that electricians did not exist in Booth's survey of occupations. It was known that Aberystwyth had a gas works since 1838^{8.54} but electric light was not introduced until 1892, a year after the census covered by the present study.

There were 483 building sector operatives. These subjects have been analysed by trade and are shown in Figure 81, below. Carpenters and joiners, and masons accounted for more than three-quarters of the subjects in this sub-sector of building and construction. The five subjects identified under 'others' include two labourers, two gasfitters and just one bricklayer. Howell and Baber make the point that, before the First World War, rural communities

8.54 Lewis, W J, 1980. *Born on a Perilous Rock*. Aberystwyth: Cambrian News, 110-111. ISBN 0900439041

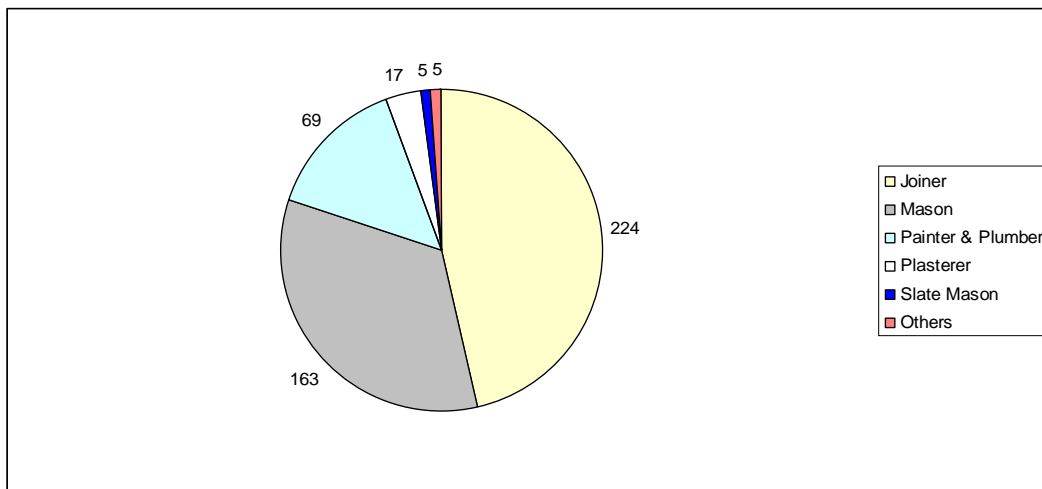


Figure 81 - Distribution, by number, of building tradesmen

were, and indeed, had to be, self-sufficient, to a degree^{8.55}. “Accordingly, craftsmen were to be found in abundance in the rural towns and villages and included . . . carpenters, . . . stonemason, . . .”. David Jenkins^{8.56} is even more direct in stating that communities relied on the building trades and other craftsmen in order to function: “The elite of the craftsmen were the blacksmiths and the carpenters”. Then, Howell and Baber^{8.57} set the connection between agriculture and craftsmen in a wider context:

‘ . . . Although many of the rural towns remained closely bound up with the character and fortunes of the local agricultural economy and, indeed, their large numbers of craftsmen were closely connected with farming, nevertheless traders like, bakers, milliners, grocers, drapers, chandlers and chemists, together with the growing numbers of professional people like lawyers, surgeons, schoolteachers, clergymen, printers, booksellers, postmasters and bankers, were clearly , independent of agriculture. . . ’

8.55 Howell, D W, and Baber, C, 1990. Wales. In: Thompson, F M L, ed. *The Cambridge Social History of Britain Volume 1 Regions and Communities*. Cambridge: University Press, 297-298. ISBN 0521257883

8.56 Jenkins, D, 1971. *The Agricultural Community in South-West Wales at the turn of the Twentieth Century*. Cardiff: University of Wales Press, 77, 82. ISBN 090076872X

8.57 Howell and Baber, C, 1990. Wales. In: Thompson, F M L, ed. *The Cambridge Social History of Britain Volume 1 Regions and Communities*. Cambridge: University Press, 300. ISBN 0521257883

The Roadmaking sub-sector included twenty-nine road labourers and twenty-eight railway platelayers.

8.8.4 Manufacture sector occupations

This was an extensive classification comprised of thirty-one sub-sections, all further divided and then subdivided. It should again be pointed out, that, in this occupational sector, as in the others, interpretation and analysis have to take into account certain conventions and ambiguities. This is illustrated quite well by Armstrong^{8.58} when citing how a number of occupations can be classified as manufacture but also as dealing. A baker, for example, can be classified as a manufacturer of bread. Of course, bakers could also have shops where they would deal in bread and other baked products. As with other attempts to analyse and interpret sociological records for a defined community the outcome must depend as much on the subjective view of the researcher as on the elegance and robustness of the tools that he uses. That caveat does not imply that attempts to analyse these data are misguided, but is a reminder that because a result is presented on paper and in black-and-white it needs to be viewed with a degree of caution and not necessarily as a statement of scientific fact.

Although the Booth-Armstrong classification of occupations divides Manufacture into thirty-one sub-divisions the situation across the study area

8.58 Armstrong, W A, 1972. The use of information about occupation. *In: Wrigley, E A, ed. Nineteenth-century society. Essays in the use of quantitative methods for the study of social data.* Cambridge: University Press, 191-310. ISBN 0521084121

presented a far simpler picture. This is to be expected, as Booth, in his original scheme, was attempting to cover all activities across all areas. There were 1548 subjects in the Manufacture sector distributed over twenty-five sub-divisions. The distribution of occupational categories was dominated by one sub-sector – Dress which accounted for more activity than all the other Manufacture sub-sectors combined. The ten statistically most significant sub-sectors within Manufacture accounted for ninety-four per cent of the subjects. This is shown in Figure 82, below. Across the entire study area the Manufacturing sector had a male:female ratio of 43:57 with fifty-five per cent

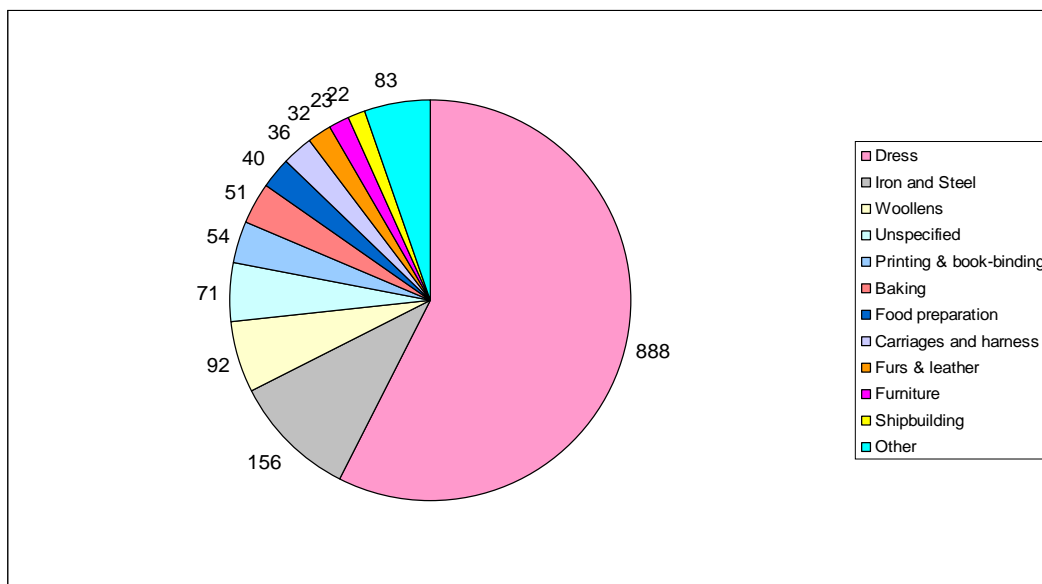


Figure 82 – Manufacture sector - distribution of subjects by sub-sector

of those involved located in Aberystwyth and Llanbadarn Fawr.

It is possible to draw some crude comparisons between Ceredigion and other areas using the 1891 census reports for selected numbers recorded against the Manufacture sector. Figure 83, below, charts the Manufacture male-female ratio expressed as percentage of females in a restricted number of

sub-sections derived from Figure 82. Figure 83 refers to the three registration (not geographic) counties of Ceredigion, Glamorganshire and Meirionnydd. These values are not at all comparable with those derived in the present study defined by the Booth-Armstrong classification of occupations. The values in the summaries reported by the Registrar General^{8.59} use different definitions for manufacturing activity and for different sub-divisions within that sector. The male:female ratios for the cross-county comparisons covered the occupations of Dress, Iron and steel, Woollens, Books and printing, Carriages and harness, Furs and leather, Furniture and Shipbuilding. It was not possible to include reliable values for Baking and for Food preparation. Some significant sub-sectors including tinplate manufacture are excluded.

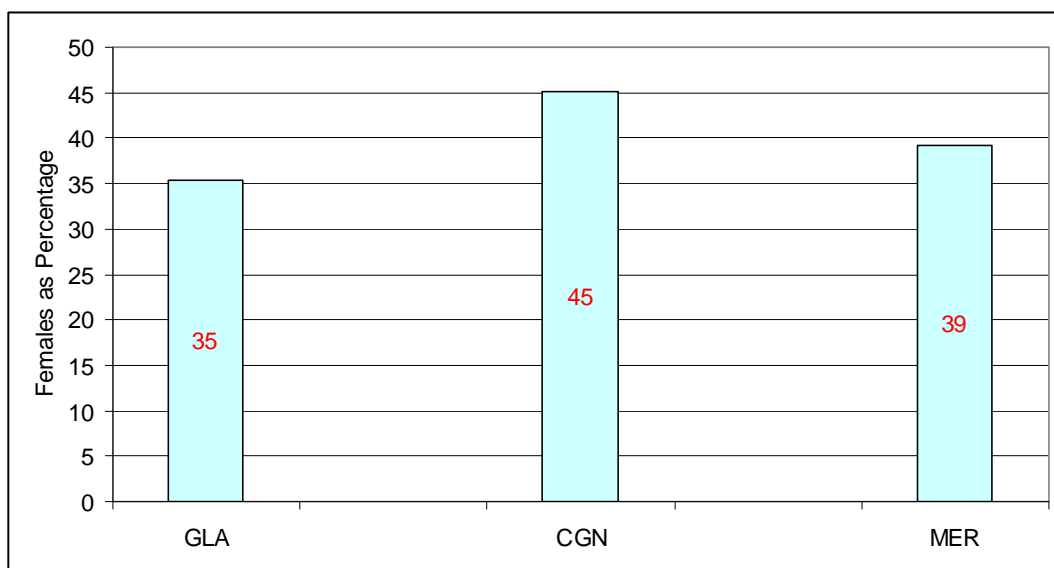


Figure 83 – Percentage of females, aggregated for selected Manufacture occupations

In relative terms these results echo the observation in Figure 66, above,

8.59 Registrar-General, 1893. *Census of England and Wales 1891. Condition as to Marriage, Occupations, Birth-place and Infirmities*. London: HMSO, Volume 3, Table 7

that more women were at work in rural areas than in the industrialised counties.

Dress

There were almost 900 subjects in this sub-sector. As this was such a major activity the numbers of subjects recorded justified drilling down to a lower and more specific area of activity. It was possible, for example, to differentiate between Tailors and clothiers, and Milliners and dressmakers; see Figure 84, below. Of 163 Tailors and clothiers, seven were women and there were twenty-one apprentices. All 558 Dressmakers and milliners were female and forty-six of those were apprentices. The weighted mean age of Tailors was thirty-nine, and of Dressmakers it was twenty-seven.

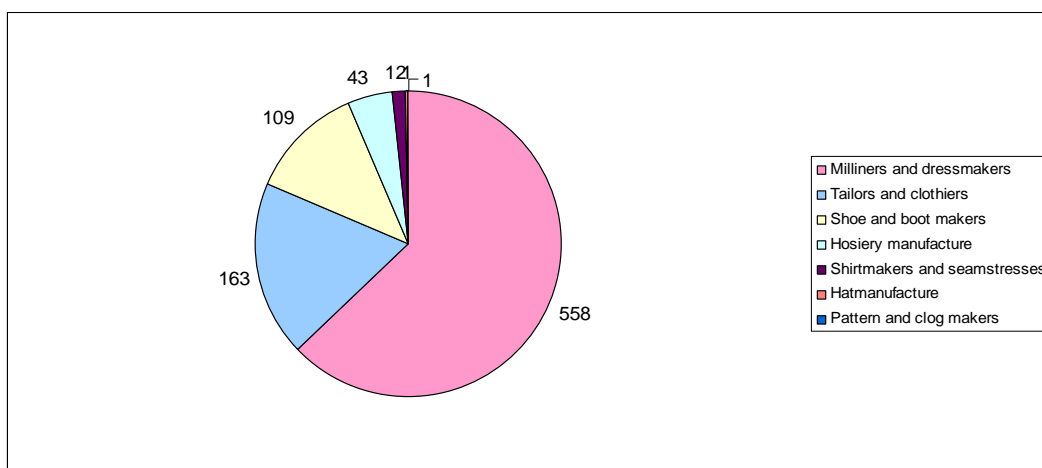


Figure 84 – Dress sub-sector, numbers of subjects recorded

Harris^{8.60} maintains that, in Victorian times, there were limited routes through which women could acquire non-manual occupations and the financial independence and respectability they provided. She includes cleaning and laundry work in her definition of manual trades. Millinery and dressmaking

8.60 Harris, B, ed, 2005. *Famine and fashion: needlewomen in the nineteenth century*. Aldershot: Ashgate Publishing. ISBN 0754608719

provided women with a rare opportunity to train and acquire the skills required to enter a recognized trade. The poorer families would have found it difficult to pay for their daughters to be apprenticed so dressmaking as a trade was not open to them and carried a certain social status. Dressmakers could work at home whilst caring for children and other family members and retain a degree of independence. Figure 85, below, charts numbers of dressmakers by age and by marital status. It shows a sharp rise in activity to around the age of twenty-one years followed by a decline to around the age of fifty-five years. The evidence here suggests that, at least in the study area, once married, a woman did not generally remain in this occupation.

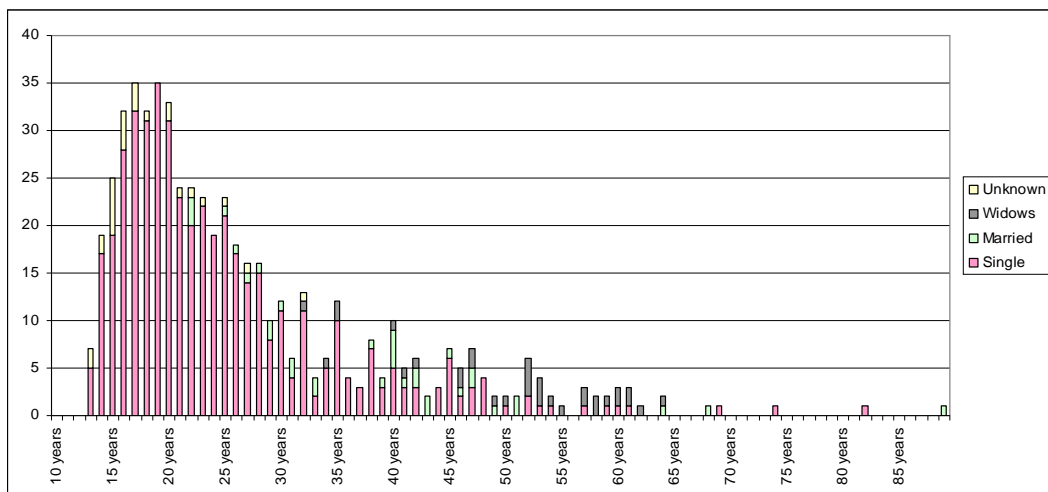


Figure 85 - Dressmakers and milliners - age distribution and marital status

In earlier times spinning and carding wool would have been a home-based occupation for women. Gerald Morgan states that such work had long been transferred to mills with their advantages of economies-of-scale and access to advanced technologies^{8.61}.

8.61 Morgan, G, 2006. *Ceredigion: a wealth of history*. Llandysul: Gomer Press, 168. ISBN 1843235013

Forty-three subjects across the study area were recorded under Hosiery manufacture. Of these forty-three, forty were described as stocking knitters and twenty-three of those were widows. There were twenty-two stocking knitters based in Lledrod Uchaf parish alone. Tibott^{8.62} suggests that knitting stockings was a crucial source of income for survival in some households. The present study shows that this area of activity was undertaken, mainly by older women, perhaps in an effort to avoid applying for parish relief. Associated with this cottage industry was the custom of gathering wool from hedgerows and thickets where sheep had shed some of their fleece.

Woollens

This sub-sector accounted for ninety-two subjects. Twelve were involved in flannel manufacture, with two being female, twenty-seven in wool spinning, all male, forty in wool weaving, with nine being female. Finally, there were eight quilt makers, all female. J G Jenkins^{8.63} states that factories were initially established to meet demand from the lead miners in north Cardiganshire and were located at Tal-y-bont, Borth, Devil's Bridge, Llandre, Llanfihangel-y-Creuddyn, Pontrhydfendigaid, Pont-rhyd-y-groes, and Ystrad Meurig. Factories supplying the local market were established at Llanrhystud, Llan-non and Lledrod. Carding and fulling mills were located on the banks of streams and operated in conjunction with domestic spinners and weavers working at home to firstly supply raw materials and then finish the woven cloth. There are linkages and parallels between dressmaking and tailoring, between tailoring and weaving, and between weaving and drapery

8.62 Tibbott S M, 1978. Knitting Stockings in Wales – A Domestic Craft. *Folk Life*, 16, 61-73

8.63 Jenkins, J G, 1968. Rural industries in Cardiganshire. *Ceredigion*, 6 (1) 99

Connections, therefore, between manufacture and dealing. In 1851 Hugh Hughes (1783-1856) was a woollen weaver, age 55, living at Issayndre, Llanbadarn Fawr. The census returns, 1841 to 1891 show that his son, John Hughes (1807-1893) of Issayndre was also a woollen weaver. A grandson of John was James Hughes (1861-1917) of Quebec Cottages, Llanbadarn Fawr, (Figure 10), and his occupation was recorded as flannel merchant and weaver. After his death, his widow, Mrs Ann Hughes (1868-1958), appears to have carried on the family business, at least for a time. Kelly's Directory of 1927 lists Mrs James Hughes of Llanbadarn Fawr, Woollen Draper.

Iron and steel

This was the second largest sub-sector within Manufacture, but with about one-sixth of those occupied in Dress, with 156 subjects involved. There were 123 blacksmiths, including Mrs Cathrine Williams, age 48, widow of New Cross, Llanbadarn-y-Creuddyn Isaf. There were thirty subjects associated with the foundries, including foundrymen, moulders and pattern makers. All were male, living in Aberystwyth, and included George Green age sixty-seven, Iron Founder of Salisbury House, born Codsall, Staffordshire. His wife, Margaret, formerly Jones, was age thirty-four, born Aberystwyth, and bilingual. J G Jenkins^{8.64} noted that there were 'at least' 104 blacksmiths' shops in Ceredigion up to the early 1930s. A blacksmith would not only apply his (or her!) skills to the shoeing of horses, but to the repair of agricultural machinery and manufacture of farm and household implements and utensils.

8.64 *ibid*, 109

Food preparation

There were forty subjects in this sub-sector with all (except two sugar boilers) being identified as millers. Six millers or miller's assistants were female. The subjects were dispersed widely across the study area at Aberystwyth, Ceulan-a-Maesmor, Cwmrheidol, Cynill Mawr, Elerch, Gwnnws Isaf, Llanbadarn Fawr, Llanbadarn-y-Creuddyn Uchaf, Llanddeiniol, Llanfihangel-y-Creuddyn Isaf, Llangwryfon, Llanrhystud, Lledrod Isaf, Lledrod Uchaf, Melindwr, Trefeurig, and Ysbyty Ystwyth. J G Jenkins^{8.65} noted (then writing in 1968) 'of the seventy-two corn mills that operated in the county in the early nineteen twenties not one remains in constant work.'

Shipbuilding

There appeared to be some remaining vestiges of this once-important industry with twenty-three males listed as ship carpenters and boat builders with a block maker, a rope maker and a sail maker. All were located in Aberystwyth and Llanbadarn Fawr, except one ship carpenter living in Borth.

8.8.5 Transport sector occupations

This sector was categorised in five parts. One of these, Inland navigation, has no relevance to the present study, as it was unlikely that there would be canal and bargemen found – unless they were visitors to the area, of course. The study area did contain subjects occupied in Warehouses and docks, including messengers and porters, in Ocean navigation, in Railways; and in Roads.

8.65 *ibid*, 91

Transport was one of the smaller occupational sectors, involving a little over 400 subjects. Figure 86, below, shows how they were assigned across the four sub-sectors.

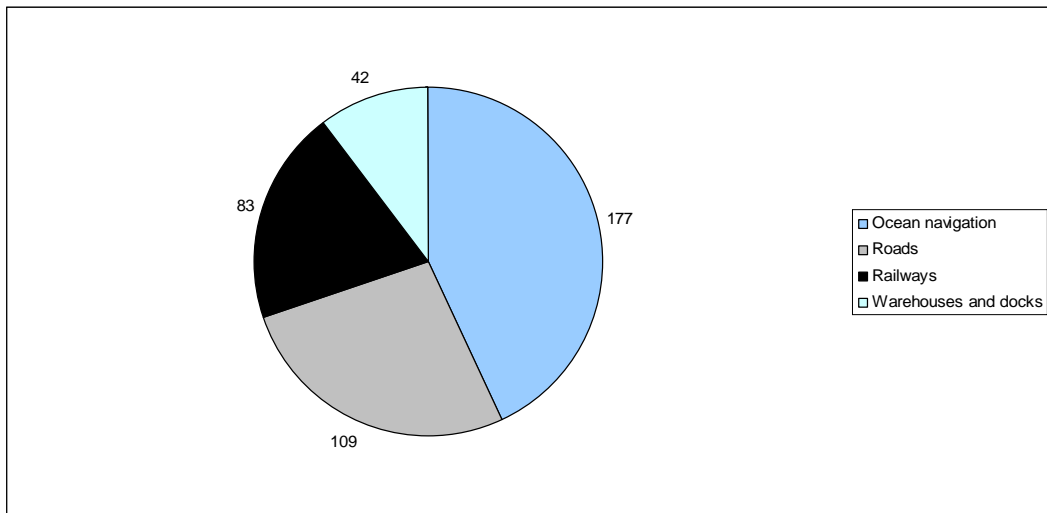


Figure 86 – Distribution of subjects across Transport sector

Warehouses and docks

There were forty-two subjects, including errand boys, messengers, porters and warehousemen. The most senior subject was John Thomas, age sixty, of Aberystwyth, Harbour Master and Lloyds Agent. There were three females: a warehouse woman in Aberystwyth, one letter carrier in Llanrhystud, and another in Cyfoeth-y-Brenin.

Ocean navigation

The 177 subjects, all male, included 111 mariners or sailors with fifteen being retired, fifty-two master mariners or sea captains, twelve of whom were retired, and thirteen boatmen. All the boatmen were found in Aberystwyth. Overall, the distribution of these subjects is quite interesting. The majority lived in Aberystwyth; this is hardly surprising given its historical position as a

sea-port. However, a significant number lived in Cyfoeth-y-Brenin which, in effect, means Borth. Figure 87, below, shows the reported locations of the

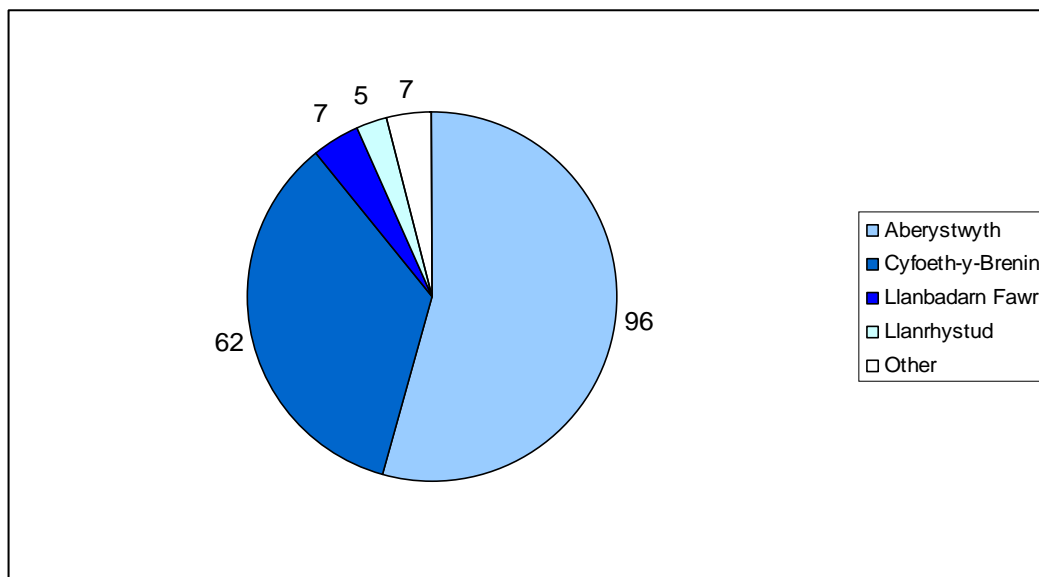


Figure 87 – Distribution of mariners, by residence

mariners across the study area. Moelwyn Williams^{8.66} has a photograph of old sailors in Borth in his account of ports, harbours and shipping in Ceredigion. It is probable the numbers enumerated for seamen and mariners are too low and do not reflect the true position. Men from the study area would not show up in the census returns when their ships were at sea or in ports outside Aberystwyth. Higgs^{8.67} describes the procedure for enumerating persons on board ship in 1891. The provisions were intended to cover crew and passengers on vessels from ports around Cardigan Bay and on those registered at overseas ports whether at sea or in port on the night of Sunday, 5 April 1891. The census returns list seven vessels, the *Albatross* at

8.66 Williams, M I, 1998. Commercial relations. In: Jenkins, G H and Jones, I G, eds. *Cardiganshire County History Volume 3 Cardiganshire in Modern Times*. Cardiff: University of Wales Press, 209. ISBN 0708314899

8.67 Higgs, E, 1991. *Making Sense of the Census*. London: HMSO, 43-44. ISBN 0114402191

Aberporth, the *Cardigan Bay Light Vessel*, the *Eleanor* of Aberystwyth but berthed at Cardigan, the *Elizabeth Davis* in Cardigan Bay, the *Ellen Owens* off St Dogmaels, the *Lissie* at Aberystwyth, and the *Mary Jane* at Cardigan. The census returns provide just one subject in this sub-sector relevant to the present study. This is the fisherman John Pugh who is included in the Agricultural sector, above. In an account of the part played by seafarers from Ceredigion in the merchant service, David Jenkins^{8.73} refers to ships owned by John Mathias, who was born in Penparcau in 1837. These were tramp steamers operating out of Cardiff, and which, due to the town of origin of many crew members, were known as *llongau Aberystwyth*. It was also true that many men who left the coastal towns and villages of Ceredigion to become mariners never returned to their homes. Cemeteries and graveyards up and down the coast bear testimony to that. In the churchyard of Llanfihangel Genau'r Glyn (Llandre) there is a memorial inscription that reads:

‘In loving memory of JOHN LLOYD, Master Mariner, Borth who died at Santiago da Cuba July 30th 1890 age 50 years and was interred the same day at the cemetery Santiago’.

Railways and Roads

There were eighty-three railwaymen in the study area including eighteen railway porters, mostly living at Aberystwyth and Llanbadarn Fawr, but also at Llanilar, Ysgubor-y-coed and Ystrad Meurig. Motive power department staff comprised nineteen engine cleaners, firemen and drivers, all living in Aberystwyth. Four rolling stock inspectors were based in Aberystwyth, where there were also seven guards and eleven clerks. Eight station masters

8.68 Jenkins, D, 1987. Cardiff Tramps, Cardi Crews: Cardiganshire Shipowners and Seamen in Cardiff, c 1870-1950. *Ceredigion*, 10 (4) 405-430

covered Aberystwyth, Llanbadarn Fawr (two subjects), Henllys (two subjects), Llanilar, Ysgubor-y-coed and Ystrad Meurig. These men were clearly members of staff of both the Cambrian Railways^{8.69} and the Manchester and Milford Railway (MMR) running, respectively, north and south from Aberystwyth. Ystrad Meurig (also known as Strata Florida) and Llanilar were MMR stations^{8.70}. Four signal fitters, apparently contractors from Herefordshire and Worcestershire^{8.71}, were enumerated as was one wheeltapper, William Davies, age sixty, of Llanbadarn Fawr.

Almost 100 subjects were connected with road transport and included waggoners, ostlers, carriers and cab and car proprietors

8.8.6 Dealing sector occupations

This sector divides into thirteen nominal sub-sectors and the study area

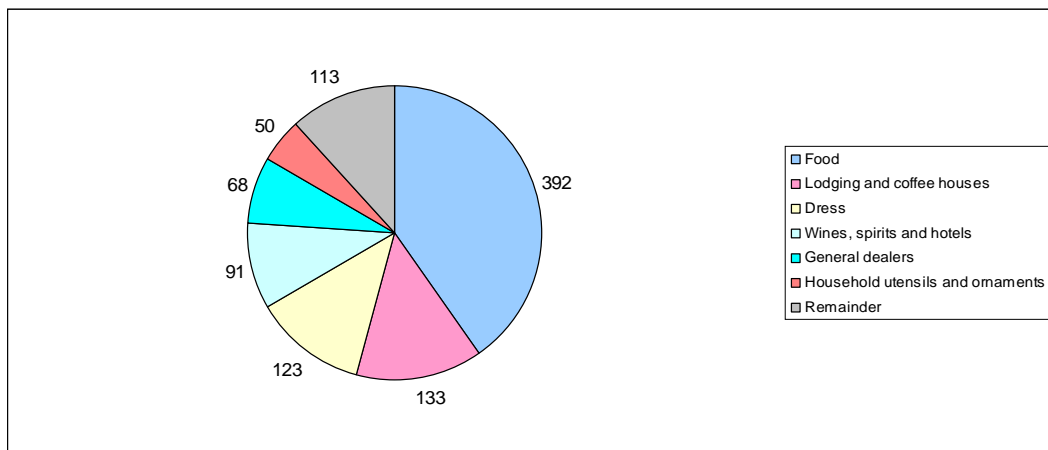


Figure 88 – Distribution of subjects across Dealing sector

8.69 The Cambrian was the only British railway company with a plural 's' in its name.

8.70 Baughan, P E, 1991. *A Regional History of the Railways of Great Britain. Volume XI North and Mid Wales*. Nairn: David St John Thomas Publisher. ISBN 0946537593

8.71 Dutton & Co, Signal Engineers of Worcester built the signal boxes at Borth and Aberystwyth

provides subjects in all of these from Food, the statistically most numerous with 392 subjects, down to Tobacco with just two. Figure 88, above, shows that the six numerically most significant sub-sectors within Dealing account for ninety per cent of subjects. Food, lodging houses and coffee houses accounted for more than half of those involved. With two other sectors, dress retailing and hotels, these four areas employed more than three-quarters of the Dealing workforce, indicating that these retailing and service industries were becoming significant employers across the study area.

Food

Within this sub-sector it may be seen, from Figure 89, below, that grocers, butchers and milkmen accounted for the greatest levels of activity. It should, however, be noted that these descriptions are not always clear-cut and absolute. There are examples where a grocer might, additionally, be a draper or postmaster, or, in one case, a solicitor.

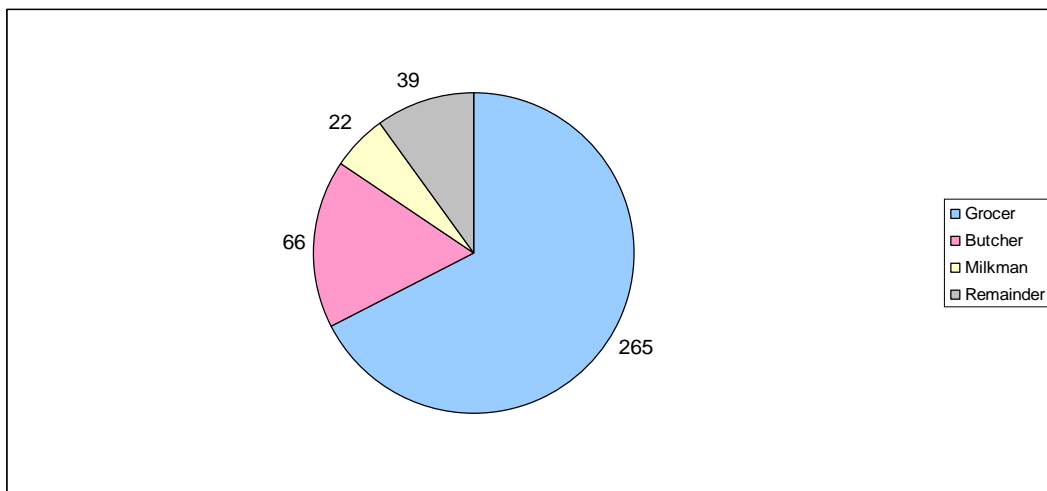


Figure 89 – Most significant activities within Food sub-sector

Lodging and coffee houses

129 subjects reported their occupations as lodging and temperance house keepers. 177 of these were women, with 116 in Aberystwyth and nine in Cyfoeth-y-Brenin; these were clearly seaside landladies in Aberystwyth and Borth. Four subjects were involved in refreshment rooms in Aberystwyth, including 12-year old Evan M Davies and (unrelated) Mrs Mary Davies who was manageress of a cocoa house.

Dress

118 subjects were recorded as drapers and drapers' assistants. Fourteen out of fifteen apprentice drapers were male. Drapers frequently had other occupations, including those of tailor and grocer. Drapers were among the most ubiquitous of tradesmen. Although the majority of the drapers (seventy-two) were located in Aberystwyth, others were widely dispersed across a large number of other rural parishes. There was one hatter and four subjects who were working in boot and shoe shops.

Wines, spirits and hotels

Licensed victuallers and publicans (twenty-nine subjects), inn keepers (forty subjects) and hotel keepers and proprietors (sixteen subjects) dominated this sub-sector. All the hotel proprietors were located in Aberystwyth with keepers of other establishments spread across a wide range of rural parishes. There were six wine and spirit merchants. (Inn and hotel servants are classified under the Domestic service sector).

8.8.7 Industrial service sector

This sector is divided into two somewhat contrasting sub-sectors, covering, firstly, banking, insurance and accounts – what would now be termed financial services – and, secondly, general labourers. Figure 90, below, shows that the number of subjects involved in the financial services sector

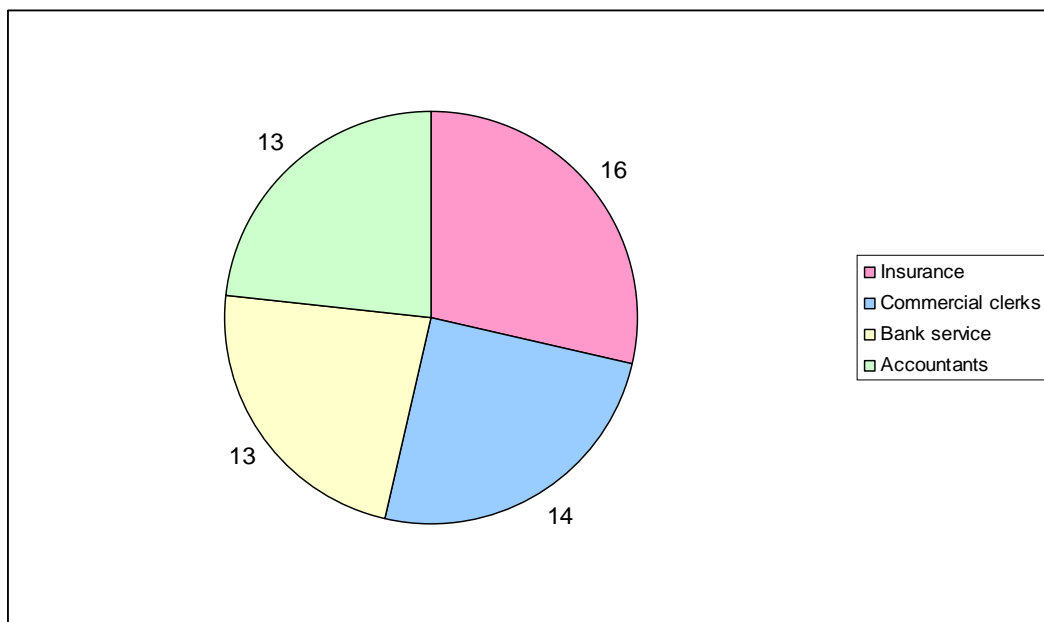


Figure 90 – Numbers of subjects in banking, insurance and accounts are divided almost equally between the four areas. Forty-eight of the fifty-six subjects in this sub-sector lived in Aberystwyth and Llanbadarn Fawr. This, again, confirms the status of the town as a regional centre providing services beyond its own immediate boundaries. All the subjects were male, apart from three female clerks. There were some 260 subjects categorised as general labourers, including three women.

8.8.8 Public service and professional sector

460 of the 612 subjects categorised in this sector were male, hence twenty-five per cent were female. There were subjects to be found in thirteen of the fourteen sub-sectors but nine of these groups accounted for ninety-five per

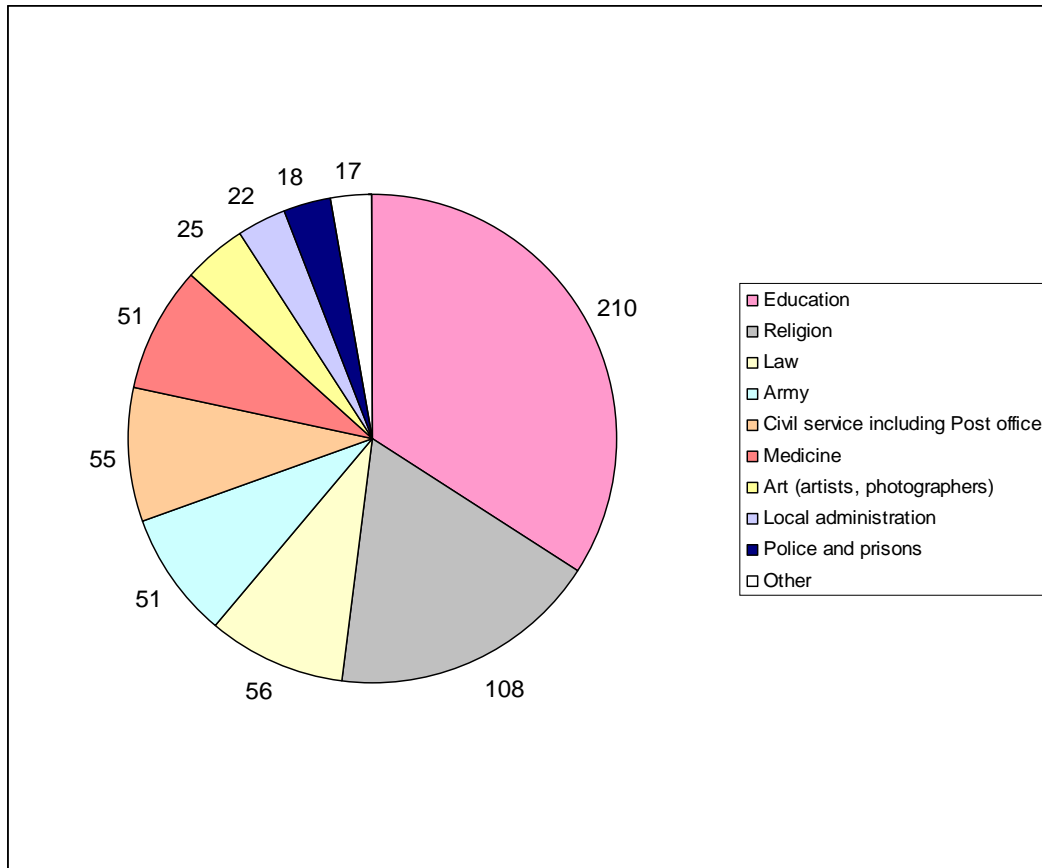


Figure 91 – Public service and professional sector – distribution of subjects
cent of subjects, as shown in Figure 91, above. The smaller sub-sectors included Art (music, theatre, games) – nine subjects, including three billiard markers and two itinerant musicians from Italy, Literature – five subjects, including John Gibson (later Sir John), distinguished owner and editor of the *Cambrian News*, Sanitary administration – one subject, John Rowland,

Inspector of Nuisances, and Science – one subject, a retired analytical chemist. Two sub-sectors, Education and Religion accounted for half the subjects in this area and they are discussed in a little more detail, together with Law and Medicine and the Army.

Education

Schoolmasters (and mistresses): there were thirty-three males and nineteen females distributed widely between Aberystwyth and the surrounding rural parishes.

Governesses: there were twenty-eight governesses and private tutors mostly, but not exclusively, employed by the gentry families in the area.

Teachers, professors, lecturers: these included fifty-six male and female teachers and four male lecturers. The teaching staff at the University College included professors of Latin, Philosophy, English, Music (three), Chemistry and Physics. Among the female academics was Miss Maria E Jones, Professor of Music, and Miss Emily Ann Carpenter, Principal of Hall of Residence, University College. In the category identified as School Service were fifteen male and twenty-four female pupil teachers, one teaching assistant and three school attendance officers.

Religion

This sub-sector included thirty-four clergymen of the Established Church, one Roman Catholic priest, Father Thomas Carolan of Aberystwyth, and fifty-eight ministers of other denominations. The nonconformist movement was dominated by twenty-eight Calvinistic Methodist and Presbyterian ministers and preachers, with seven Wesleyan Methodist ministers, six Baptist

ministers, five Independent and Congregational ministers. There were also three lady officers of the Salvation Army. All the other ninety or so clergymen, ministers and preachers were, of course, male. There were, however, four female chapel keepers cited in the category of church and chapel officers and servants. Four of the Wesleyan Methodist ministers were in Aberystwyth with others at Cwmrheidol, Llangynfelin and Ysbyty Ystwyth. Cooper^{8.72} has suggested there may have been a connection between the influence of Wesleyan Methodism and the Cornish miners who had moved to Ceredigion.

Law

This category included twenty-nine solicitors' clerks, twenty-two solicitors and four magistrates. The majority (forty-nine) of the subjects lived in Aberystwyth and Llanbadarn Fawr.

Medicine

There were six dental surgeons, including one apprentice, and nine general practitioners. There were ten surgeons and seventeen pharmacists, with seven of those being apprentices. On the female side there were eight nurses, including Mrs Frances Ankers, Matron of the Infirmary. One particularly interesting subject was Mr David William Lewis of Llangynfelin; his occupation was given as *accoucher* – male midwife.

The Military

Lewis^{8.73} gives a chronological account of the formation and progress of a company of militia in Ceredigion from the Middle Ages through to its operation

8.72 Cooper, K, 2009. Trefeurig, 1851-1891: a case study of a lead mining township. *Ceredigion*, 16 (1), 111-112

8.73 Lewis, W J, 1980. *Born on a Perilous Rock*. Aberystwyth: Cambrian News, 213-216. ISBN 0900439041

as a rifle regiment until 1877. At that time it was re-formed into an artillery regiment and by 1891 was known as the Cardigan Royal Garrison Artillery Militia. Militiamen were trained reservists and were based at the Barracks, near to the Workhouse. There was a separately constituted force of volunteers based at the Drill Hall off Smithfield Road. The Royal Artillery Militia based at the Barracks was a community of some significance. Not only were regular soldiers, including a number of senior NCOs, located there but there was also accommodation for their families. Sgt Major William Holmes, Royal Artillery was accommodated with his wife, Mrs Rose Holmes and five sons and two daughters. Sgt Major and Mrs Holmes both came from Hampshire. Their eldest son, Arthur, age eighteen was an Iron Turner and was born at Woolwich, Kent. Their eldest daughter, Rosina, age sixteen, a Dressmaker was born at Aldershot, Hampshire. Woolwich Arsenal was, of course, the headquarters depot of the Royal Artillery. The five younger children aged from twelve to two years were all born in Aberystwyth. The places of birth of the children of serving soldiers provides some clues as to where their fathers had been posted in earlier stages of their military careers. Quarter Master Sgt William Dallison, Royal Artillery, originally from Acton, Middlesex was living in the Barracks with his wife, Mrs Jane Dallison, a native of Pembroke. They had ten children, all born in Aberystwyth. Staff Sgt William Long, Royal Artillery, a Wiltshire man lived at the Barracks with his wife Mrs Catherine Jane Long, a local girl who spoke Welsh, as did three of their four children. Not all the soldiers lived in the Barracks and some were boarded out in town. Two Worcestershire men, Corporal George Jones, Cardigan Artillery,

and his brother Gunner Joseph Jones, Cardigan Artillery, lodged at 5 Vaynor Street. The military contingent enumerated in Aberystwyth with Royal Artillery affiliations included two battery sergeants major, four staff sergeants, two quarter master sergeants, one sergeant major, four sergeants, a corporal, five gunners, six soldiers and a trumpeter. No commissioned officers are found at The Barracks in Borth Road in 1891, they were usually members of the local gentry. Clearly the military contingent must have had some impact on the civic and social life of the district and not just the town. The regiment had an establishment of 619 in 1891 with an actual strength of 503 militiamen^{8.74}. The six batteries of the Cardigan R G A were responsible for the defence of Milford Haven where they undertook their annual training at the string of thirteen forts that had been created to protect the Royal Dockyard.

8.8.9 Domestic service sector

This was a major source of employment encompassing over 2 200 subjects, about four times the number engaged in dressmaking and millinery. In this present study domestic service is examined and divided into three main areas. These are Indoor servants with 1 840 subjects, Outdoor servants with 160 subjects, and, Extra service with 200 subjects. As has already been shown in this chapter, employment opportunities for young, single, working-class women were limited. Those who did not move away from the area to

8.74 Owen, B, 1995. *History of the Welsh Militia and Volunteer Corps 1757-1908. Carmarthenshire, Pembrokeshire & Cardiganshire (Part 1)*. Wrexham: Bridge Books, 14-19, 109-110. ISBN 1872424511

London and other English cities generally had a choice between dressmaking and domestic service. There is evidence of movement of women into Aberystwyth from the surrounding rural areas. In and around the town there was a middle-class element that required domestic servants. There were also opportunities for men in this predominantly female scene. Gerald Morgan's^{8.75} note on the matter is succinct – ‘ . . . Women's work in 19th-century Cardiganshire was overwhelmingly domestic . . .’. The values reported here confirm this.

The Indoor servants sub-sector was further categorised as Indoor servants, Inn and hotel servants, and College, club, hospital, institution and other servants.

Indoor servants

There were nearly 1 800 subjects in this group, ninety-seven per cent being female. It was clear that this area required some subjective interpretation and that the returns could not be read at face value. Many of the female subjects classified as domestic servants were obviously family members engaged within their own household to support the other members. Unmarried sisters would be keeping house for bachelor brothers or daughters would stay at home to support widower fathers and other siblings. The term ‘housekeeper’ therefore requires a degree of interpretation. In some cases it was fairly clear that female servants were engaged on a formal employer-employee relationship where they were described as ‘Domestic cook’ or ‘Parlour maid’.

8.75 Morgan, G, 2006. *Ceredigion: a wealth of history*. Llandysul: Gomer Press, 144. ISBN 1843235013

The status of the thirty women who gave their occupation as ‘Assisting family’ was also quite clear. It is estimated that, perhaps, 455 of 1 722 women were retained at home as cooks or housekeepers; say some twenty-five per cent. The implication must be that such subjects were not bringing in a wage to add to the net household income. But in so doing they were clearly allowing other family members the freedom to go out to work. Figure 92, below, shows the distribution of female indoor servants as an indication of the relative

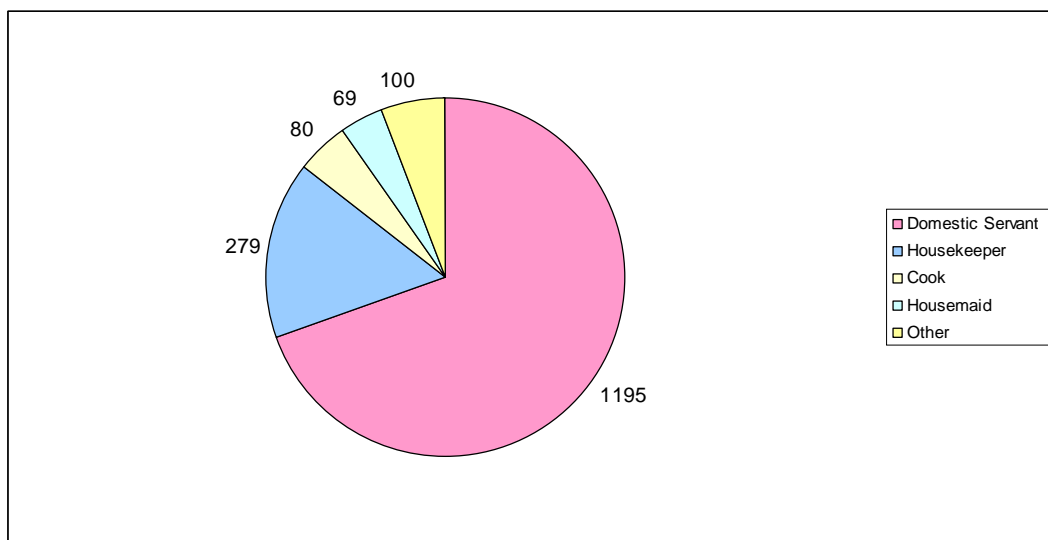


Figure 92 – Distribution of female indoor servants

descriptions found in the enumerators’ returns. The 100 subjects categorised here as ‘Other’ included domestic nurses and nursemaids, parlour maids, kitchen maids, maids, laundry maids, and ladies’ maids. It is important that care should be taken in not reading too much into these descriptions. Figure 93, below, shows the age distribution for all female indoor servants, including those who may have been termed housekeepers whilst assisting at home. The curve rises sharply to around the age of twenty then falls significantly to around age thirty, followed by a long, slow decline. This graph is very similar

to Figure 85, above. In fact it is almost a mirror-image of the age distribution curve for dressmakers and milliners, and probably for the same reason. That is, women marrying from the age of twenty and vanishing from the recognised

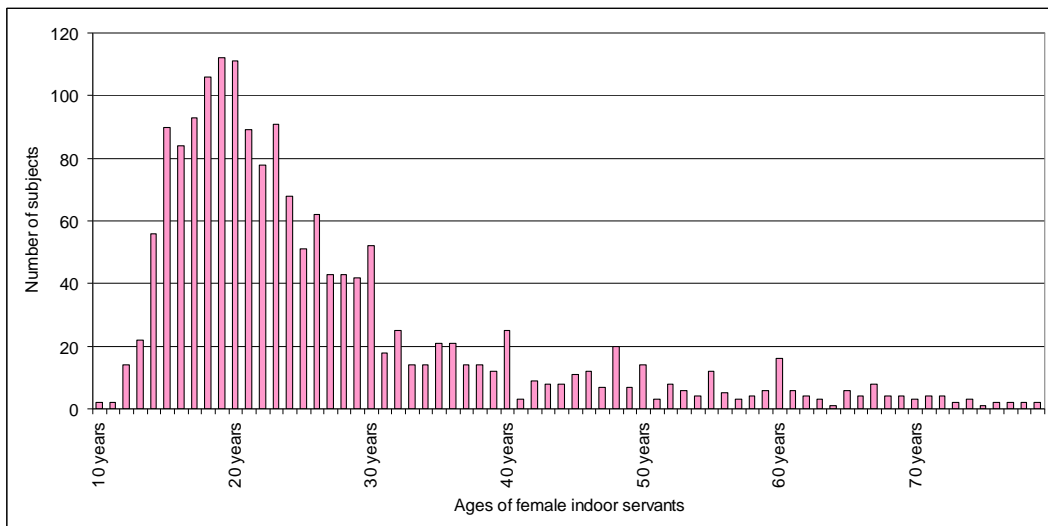


Figure 93 – Age distribution of female indoor servants

labour market. The forty-seven male indoor servants enumerated included five butlers and three footmen.

John Williams has also alluded to the ambiguous position of wives, daughters and other female relatives acting as unpaid domestics at home^{8.76}. This area of female activity will almost certainly have included some wives who were assisting with the business of their husbands and who, therefore, were economically active. Williams has also pointed out that there is some distortion of the reported figures for employment in domestic service in 1891 due to an instruction (rescinded in 1901) that women ‘assisting at home’ should be classified as domestic servants.

8.76 Williams, J, 1995. *Was Wales Industrialised? Essays in Modern Welsh History*. Llandysul: Gomer Press, chapter 3, Women at work in nineteenth-century Wales, 61. ISBN 1859021395

Of course, the houses and estates of the gentry provided employment for indoor and outdoor servants. These can be found listed against the census returns for Gogerddan, Nanteos, Mabws and other houses in north Ceredigion. The estate of Hafod Uchtryd was located in the parish of Llanfihangel-y-Creuddyn. It had been developed and improved by Thomas Johnes (1748-1816) and was bought by Thomas James Waddingham in 1872^{8.77}. The subjects enumerated in the schedule 1891 census return for Hafod (RG12/4561 f40 p3 sch 14) are listed in Appendix E.

The details in these entries provide a useful insight into the workings of a middle-class Victorian household. Mrs Thomas J Waddingham and her mother, Mrs Davies, are recorded as speaking Welsh, as are the servants Miss Mary Thomas and Miss Sarah Jones. Of particular note is that the Yorkshireman, Mr Waddingham, also spoke Welsh. He had married Miss Sarah Davies in late 1883 and, by that time, had resided at Hafod for some years.

Cooper^{8.78} has suggested that senior positions within the households of gentry families in Ceredigion, such as butler, were held by incomers to the area. The five butlers found in the study area were (with their employers) David Walters, retired, inmate in the Union Workhouse, native of Llanbadarn Lower, John Lewis (Bonsall of Cwmcynfelin), native of Llanfihangel, William Challoner (Powell of Nanteos), native of Market Drayton, Salop, Charles

8.77 Moore-Colyer, R J, 1998. The landed gentry of Cardiganshire. *In*: Jenkins, G H and Jones, I G, eds. *Cardiganshire County History Volume 3 Cardiganshire in Modern Times*. Cardiff: University of Wales Press, 74. ISBN 0708314899

8.78 Cooper, K, 2009. Trefeurig, 1851-1891: a case study of a lead mining township. *Ceredigion*, 16 (1), 98

Cooling (probably Pryse of Gogerddan), native of Long Compton, Warwickshire, and Oswald Church (Waddingham of Hafod), from Gloucestershire. Clearly, five subjects (out of 24 000) do not constitute a statistically significant population upon which robust conclusions might be based.

Inn and hotel servants

Fifty-one female subjects included seventeen barmaids, five chambermaids, and eight waitresses. Eleven male subjects included three barmen and five 'boots'. The majority (fifty-four) of the subjects were based in Aberystwyth and Borth, clearly this reflected the employment opportunities in the tourist trade.

Outdoor service

Forty-nine subjects were classified as grooms and domestic coachmen, all male. There were eighty-four gardeners, including four women, one gatekeeper, and twenty-seven gamekeepers. In two or three cases the subjects had more than one occupation, both as gardener and gamekeeper. John Pierce of Royal Oak, Penrhyn-coch was a gamekeeper. It is probable that he worked for Pryse of Gogerddan which was close by. It is also possible that a number of subjects who lived in the vicinity worked as outdoor servants for Mr Waddingham at Hafod. These probably included John Hutchins, gardener of Creigiau, John Watson, estate steward of Pendre, John Hughes, woodman of Nantgyfnglach, and, almost certainly, John Hughes, coachman of Hafod Upper Lodge.

Extra service

There were over 200 subjects in this 'catch-all' sub-sector with the category totals shown in Figure 94, below. The washing and bathing service was comprised mainly of laundresses. This sub-sector was dominated by female workers with 203 women and twelve men, the latter including seven hairdressers and the three chimney sweeps.

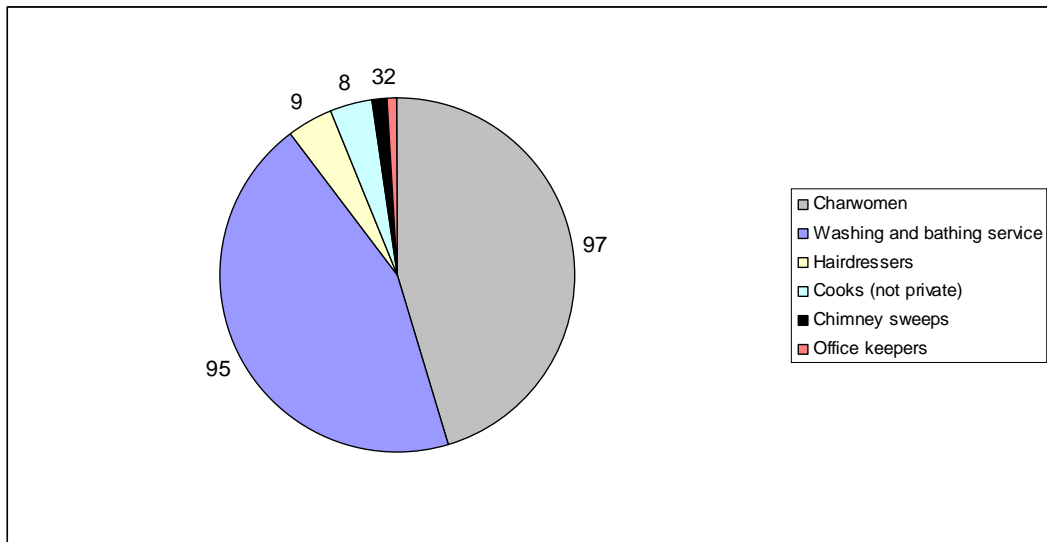


Figure 94 – Numbers of subjects categorised as Extra service

8.8.10 Property owning, independent

Only one subject was categorised as a property owner – Mr Herbert St James Stokes, and he was a visitor and not a resident of Ceredigion. That single entry for property owners or landed proprietors highlights a weakness, a lack of precision in the census returns and property owners, as such, are clearly under-reported. For example, Mr Waddingham of Hafod describes himself as 'Magistrate' and 'Living on his own means'. There were 603 subjects in the

study area categorised as 'Persons of independent means'. That classification was applied to subjects variously described as annuitant, living on his/her own means, gentlewoman, and so on. There were many more women than men, the male:female ratio being 13:87. The youngest subject in this sub-sector was Miss Mila Henkey, age seventeen, a visitor to Aberystwyth, whilst the oldest person was Mrs Jane Margaret Pugh, age ninety-eight, a resident of Parcel Canol.

8.9 Conclusions

This chapter analyses declared occupations using a modified version of a recognised coding scheme. The results derived from a mass of detailed evidence distilled from the occupational status of individual subjects are interpreted within the framework of the economic and social structure of the study area towards the end of the nineteenth century. The differences between the roles of men and women are illustrated in the context of the expectations and perceptions of gender roles in Victorian society. Proof of the tendency for married women to disappear from the labour market is provided for a number of occupational areas. In the manufacture sector the proportion of female labour is surprising. The structure of farming households is examined. Comparisons and contrasts are drawn between the mixed economy of urban Aberystwyth, with the increasing contributions from service industries, set against the rural hinterland where industries based on agriculture and mining predominated. The self-sufficiency of rural

communities is illustrated, but against a background of stagnant or declining markets, and compared with the established service sector and emerging tourist and consumer-led enterprises of the urban area. Some limited comparisons are made between the employment patterns within the study and the nature of occupations found in an industrial county together with a rural county.

Chapter 9 – Conclusion

In an ambiguously titled essay, John Williams has argued that there has been insufficient attention paid to the application of quantitative methods of analysis to Welsh history. In support of this stance he has cited the lack of statistical evidence and analyses referenced in the writings of some of the most eminent Welsh historians. In this particular essay Williams himself appears not to acknowledge that census records have potential as a basis for a study of social and economic history of, especially, rural communities. However, in other studies he makes extensive and detailed use of official census summary reports to support his arguments^{9.1}. Because of their dispersed and fragmented nature rural communities have not, perhaps, been subjected to the same level of detailed examination that has been applied to larger towns and cities through quantitative studies using census data. Those studies that have been reported for rural communities have generally been limited to a village or a parish or to defined clusters of parishes.

This dissertation describes a study involving the application of quantitative techniques to primary census records as the basis for a study of social and economic history across a defined region within Ceredigion towards the end of the nineteenth century. A principal aim was to show that the detailed, personal, evidence recorded in census enumerators' returns provides a basis for the construction of simple but robust arithmetic models.

The results of the study have been compared with the work of other

9.1 Williams, J, 1995. *Was Wales Industrialised? Essays in Modern Welsh History*. Llandysul: Gomer Press, chapter 4, Figures in Welsh History. ISBN 1859021395

researchers and tested against the available literature. Previous studies have drawn conclusions that were, generally, based on census summary reports and not the primary data. Where the primary data have been analysed those studies have looked at small, selective, and, possibly, unrepresentative populations. It is claimed that the methodology developed and applied in this comprehensive evidence-based study provides greater reliability and consistency. The results of this added-value exercise have been derived by aggregating the information relating to a very large number of individual subjects. Hence, a 'bottom-up' rather than 'top-down' approach has been used, leading to a more robust platform from which the conclusions have been drawn. The treatment of the raw data has permitted analysis of a wide range of characteristics and indicators leading to a high level of confidence in the results. That is true even when the results are inconclusive. This treatment of the primary source data has been supplemented with selected comparisons against some external communities using secondary sources of information.

The analyses for the indicators investigated and reported on have, cumulatively, required many thousands of background calculations. The results of these arithmetic analyses and comparisons are, in the main, presented in graphical form so that they are most accessible to the reader. This is a singular feature of the project methodology that sets it apart from many other studies.

The information derived from the study has been used to compare social and economic structures in the different communities across the study area. The

results have been interpreted in the context of some of the changes affecting these communities, reinforcing some existing studies that have used a more qualitative or intuitive approach. The historical and geographical background to the study is outlined followed by an explanation of the contemporary administrative structure of local government. A description of the parishes covered by the study area is provided. The historical background to the social and economic changes impacting upon the study area is reviewed against a range of published sources.

The methodology of the project is described together with the mechanisms involved in capturing the raw data through the census system. The strengths and weaknesses of census returns as a potential source of primary socio-economic data are considered.

The study provides numerical evidence for structural imbalances in population age structure and gender ratio that supports the observations of other commentators and uses comparisons with other, selected, counties. This numerical evidence suggests how abrupt changes in one long-established sector of industrial activity resulted in far-reaching demographic and social trends over succeeding generations.

It has been shown that it is possible to determine place of birth at parish level and then to apply that information, within limits, to the study of patterns of movements of subjects. That correlation has shown that rural communities were less stable than the more urbanized areas and reasons for this are suggested.

Analysis of gender ratios, of marital status and of subject ages across the study area has shown differences in the relative proportions of widows in the population. These differences have been related to variations in female employment opportunities between rural and urban areas. The situation for men was rather inconclusive. An attempt was made to correlate changes in gender ratios in a deprived area with declining birth rate and de-population.

An analysis of personal names and naming patterns suggested that the frequency of occurrence of the most common surnames reflected different levels of inward migration. Work reported on given name patterns had more originality. The data presented showed that the range of Christian names found in north Ceredigion in the late Victorian era was exceptionally limited. It is suggested that this is confirmation that conservative family values and cultural traditions were overwhelmingly predominant.

The results arising from the introduction of the question on Welsh language competence are related to gender, to subject age and to place of birth. Variations in Welsh-speaking ability are, it is suggested, linked to access to education and the nature of employment. The study embraces a definition of Welsh language ability which, it is claimed, provides for a more realistic and reliable analysis than is found in some other researches.

A major part of the study was concerned with an examination of the occupational status of the individual interpreted against the background of contemporary economic and social structures. Differences between the roles of men and women have been highlighted and explained in the context of the expectations and perceptions of Victorian society. Comparisons and contrasts

have been drawn between the dynamic, mixed economy of urban Aberystwyth, with the increasing contributions from service industries, against the rural hinterland where traditional industries and practices based on agriculture and mining predominated.

The self-sufficiency of rural communities has been illustrated, in the context of stagnant or declining markets, and compared with the established service sector and emerging tourist and consumer-led enterprises of the urban area. The differences between the roles of men and women have been investigated with some surprising results. Proof of the tendency for married women to disappear from the labour market has been provided for a number of occupational areas. One outcome of the study is that the methodology used has illuminated the role of women in society for some areas that were previously masked due to the social conventions of the time.

Finally, an interesting application for the methodology described in this study might be a comparative evaluation of the Ceredigion census returns for 1911 and 1921. Such a research project might determine what, if any, impact on society resulted from the Great War. In particular, why there was an apparent increase in the male population over this time span when the opposite might have been expected.

Part 2

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Appendix A – Tabulation f top ten surnames

England 1856 ⁽¹⁾ - %	Wales 1856 ⁽¹⁾ - %	Cardiganshire 1813-1837 ⁽²⁾ - %	Aberystwyth 1871 ⁽³⁾ - %	Present Study 1891 - %
Smith 1.4	Jones 13.8	Jones 18.5	Jones 15.8	Jones 16.7
Taylor 0.7	Williams 8.9	Davies 15.8	Davies 7.1	Davies 8.9
Brown 0.6	Davies 7.1	Evans 11.4	Evans 6.3	Evans 8.7
Jones 0.4	Thomas 5.7	Thomas 6.4	Williams 5.7	Williams 5.2
Johnson 0.4	Evans 5.5	Williams 5.0	Morgan/s 3.6	Morgan/s 5.1
Robinson 0.4	Roberts 3.7	James 3.6	Jenkin/s 3.6	Edwards 4.2
Wilson 0.4	Hughes 3.0	Morgan/s 3,5	Edwards 3.6	Jenkin/s 3.5
Wright 0.3	Lewis 3.0	Jenkin/s 3.2	Thomas 3.2	Hughes 3.4
Wood 0.3	Morgan 2.6	Lewis 2.8	Lewis 2.7	James 3.1
Hall 0.3	Griffiths 2.6	Griffith/s 2.4	Hughes 2.7	Lewis 3.0
Total 5.2	Total 55.9	Total 72.6	Total 54.3	Total 61.7

Sources:

(1) Rowlands, J, 1999. The Homes of Surnames in Wales. In: J and S Rowlands, eds. *Second Stages in Researching Welsh Ancestry*. Bury: Federation of Family History Societies (Publications)/Aberystwyth: University of Wales, 162. ISBN 18600600668

(2) Rowlands, S, 1993. The Surnames of Wales. *In: J and S Rowlands, eds. Welsh Family History: A guide to research*. Birmingham: Association of Family History Societies in Wales/Federation of Family History Societies, 68. ISBN 095207270X

(3) Benjamin, E A, 1986. *Footprints on the Sands of Time: Aberystwyth 1800 – 1880*. Carmarthen: Dyfed County Council, 125. ISBN 0860750159

A sample page from a CEB is shown above. This page carries the unique identifier RG12/4558 folio 72 page 43. RG is a letter code denoting Registrar General and RG12 is the PRO class number for the 1891 Census returns. 4558 is the piece number linked to a specific registration sub-district, or part thereof. The folio number appears on every other page where it was hand-stamped before filming. The page number in this example, 43, is that which was pre-printed in the enumerator's book. A single piece will contain a number of books, each containing, say, a page 3 or a page 7, so the use of the folio number combined with the page number provides a unique page identifier.

This example is for the Enumeration District of St Michael, Parish of Aberystwyth. The PRO/TNA reference is RG12/4558 folio 72 page 43. It reports details of a number of households in Pier Street, Aberystwyth, beginning with schedule number 254 (25 Pier Street) through to number 258 (4 Pier Street).

The significance of the columns and the data they contain is as follows:

Column 1 – Number of schedule – the enumerator was instructed to number the schedules consecutively, starting at 1. However there are many instances where enumerators do not correctly observe this instruction. They may have, for example, allocated schedule numbers to unoccupied properties for which there was no schedule; the reported schedule totals are, as a consequence, quite unreliable. Note that in Figure 2.3 the first entry – 254 is followed by 'w'; which convention applied from 1871. This annotation indicates that the householder completed the schedule in Welsh. All Welsh language schedules

then had to be translated into English as the enumerator transcribed them into his book. This instruction clearly presumed that enumerators had to be bilingual but some may have struggled at times to furnish the English version. It is not so unusual to find entries such as 'gwraig y labrer'!

Column 2 - Road, street etc & No or Name of House – 25 Pier Street

<u>Column 3 – Houses – inhabited</u>	} not
	} included
<u>Column 4 – Houses – uninhabited or under construction</u>	} in
	} this
<u>Column 5 – Number of rooms occupied if less than five</u>	} study

Column 6 - Name and surname of each person. At 30 Pier Street there is Harry Lloyd (RG12/4558 f72 p 43 sch 257). For the purposes of this study Christian names and surnames are recorded in separate data fields – thus, Harry, and then Lloyd.

Living at 4 Pier Street (sch 258) is Miss M A Davies, a domestic servant. Here, Christian name initials are not helpful so, as far as possible, the subjects' full identities have been traced through other resources such as births and marriages indexes and other census returns, earlier or later than 1891, in order to determine their full names. This action far exceeds normal practice for census transcription. In the case of Miss Davies this strategy was not successful but for the majority of subjects where initials only are cited it has proved possible to determine their first name in full.

Column 7 - Relation to Head of Family The Head of the Family or Household was normally the husband or father but they could also be a single woman or a widow. At 4 Pier Street (sch 258) there is no Head of Household shown so it is presumed that the Father and/or the Mother (if she was a widow and the

recognized Head of the Household) of the sisters Annie and Lizzie Ellis were away from home on Census night. In addition to wives, and sons and daughters, other residents were variously recorded, for example, as servant or lodger or visitor. .

Column 8 - Condition as to marriage – Married or Single or Widow/er.

Columns 9 and 10 - Age last birthday of – Males, Females.

Column 11 - Profession or Occupation The analysis of recorded occupations has formed a major part of the study.

Columns 12, 13 and 14 - Employer, or Employed, or Neither Employer or Employed

This information did not form part of the study as so many records were incomplete, ambiguous or poorly reported.

Column 15 - Where born For the purposes of this study, county of birth and parish of birth are recorded in separate data fields. There are many instances where enumerators have not recorded a recognised parish but have instead accepted a township or district or, even, an individual house or farm. Living at 30 Pier Street (sch 257) was Miss Eliza Mary Evans, a domestic servant who gave her place of birth as Bow Street. Bow Street is not a parish in its own right but a township in the Parish of Llangorwen. Where such entries were encountered they have been cross-referenced to the relevant parish in the County of Cardiganshire. Entries relating to locations outside Cardiganshire have not all been scrutinized or noted to the same degree. From the nature of some entries it would appear that enumerators did not always have a good grasp of geography outside Cardiganshire but, especially, outside Wales.

During transcription into the database every effort was made to clarify and enhance any weak or ambiguous entries.

Column 16 - If: 1) Deaf-and-dumb 2) Blind 3) Imbecile

Column 17 - Language spoken. Entries were to be 'Welsh' or 'English' or 'Both' if the respondent was bilingual.

Appendix C - Database Construction and Census Format

The Microsoft Excel spreadsheet that formed the database was created with twenty-three fields or vertical columns, lettered A through to W. Each field is here identified by its designated name and compared with the seventeen numbered columns provided in the CEBs:

Line identifier

Column A - Reference field	CEB equivalent
Example: RG12/4557 f004 p001	No direct equivalent PRO/TNA class number for 1891 Census identifier (RG12) <i>plus</i> Piece number (4557) for Llanrhystud Sub-District within the Registration District of Aberystwyth <i>plus</i> Folio number (4) <i>plus</i> Page number (1)
The reference field provides a single and unique identifier for each manuscript page	

Household schedule

Column B – Schedule	CEB equivalent
Example: 1001	No direct equivalent Enumerator District of Llanilar- Part (1) <i>plus</i> Enumerators Schedule number (1)
The District Number (1) is combined with the Schedule number (1), with leading zeros inserted to create a computer-sortable value, thus: 1001. The original Schedule numbers allocated by the Enumerator have been used, even where they do not follow the correct sequence.	

Parish

Column C – Parish	CEB equivalent
Example: Llanilar	No equivalent
This is the name of the Civil Parish used to administer the Census	

Ecclesiastical Parish or Township

Column D – Ecclesiastical Parish or Township	CEB equivalent
Example: Llanrhystud Haminiog	No equivalent
A Township in the Civil Parish of Llanrhystud	

Address

Column E – Address	CEB equivalent
Examples: Moelivor Terrace; Cottage; Gwarfelin; No 6 Ffrwdfach	Column 2 – Road, street etc and No or Name of House
In rural areas, especially, addresses may have lacked precision. Modern-day spellings were substituted where appropriate, eg Ty'n-yr-helyg instead of the original Tynyrhelyg	

Location

Column F - O S Reference	CEB equivalent
Example: SN548684 (Being the estimated map reference for the property Ffrwdfawr, Llanrhystud Parish	No equivalent
An attempt was made to estimate the map reference for each address – with four digits for urban locations describing a road or street. This was an added-value approach designed to monitor and track progress of transcription of records and note any omissions in the original coverage of the enumerators' defined district. Even on modern O S maps in rural areas it was found that at least 60% of properties listed in 1891 could still be located. This additional detail was also designed to demonstrate a significant difference between the original CEBs and the present study – for reasons of copyright.	

Forenames

Column G – Forenames	CEB equivalent
	No direct equivalent. Column 6 provides for Name and Surname
Where only initials or ambiguities were encountered every effort was made to establish, at least, a first Christian name.	

Surname

Column H – Surname	CEB equivalent
Examples: Griffith; Griffiths	No direct equivalent. Column 6 provides for Name and Surname
Transcribed as-read	

Relationship

Column I – Relationship	CEB equivalent
Examples: Head; Daur; Lodger	Column 7 - Relation to Head of Family
Transcribed as-read	

Condition

Column J – Condition	CEB equivalent
Examples: M; S; Wid; Widr	Column 8 - Condition as to Marriage
Transcribed as-read	

Age male

Column K – Age male	CEB equivalent
	Column 9 – Age last Birthday of Males
Transcribed as-read	

Age female

Column L – Age female	CEB equivalent
	Column 10 – Age last Birthday of Females
Transcribed as-read	

Occupation

Column M – Occupation	CEB equivalent
	Column 11 – Profession or Occupation
See Chapter 8	

Occupational classification

Columns N and O – Occupational classn 1 and 2	CEB equivalent
Examples: Hosiery manufacture (eg stocking knitter) – MF23.03 Lead miners – MN01.06 Photographers – PS09.04	No equivalent
This allowed for subjects with up to two occupations. See Chapter 8	

Employer

Column P – Employer	CEB equivalent
Recorded only; not analysed	Column 12 – Employer
The entries under this measure are perceived to be haphazard and irregular	

Employed

Column Q – Employed	CEB equivalent
Recorded only; not analysed	Column 13 – Employed
The entries under this measure are perceived to be haphazard and irregular	

Neither Employer or Employed

Column R - Neither Employer or Employed	CEB equivalent
Recorded only; not analysed	Column 14 – Neither Employer or Employed
The entries under this measure are perceived to be haphazard and irregular	

County Born

Column S – County of Birth	CEB equivalent
	No direct equivalent. Column 15 states 'Where Born'.
See Chapter 4	

Parish Born

Column T – Parish of Birth	CEB equivalent
	No direct equivalent. Column 15 states 'Where Born'.
See Chapter 4	

Parish Code

Column U - Parish Code	CEB equivalent
Examples: Llangorwen - CGN 72 Bow Street - CGN 72 Llwyngwril - MER 23 (actually Llangelynnin) Wrecsam - DEN 62 Rhondda, Y - GLA 136 Aberdâr - GLA 002	No equivalent.
An alpha-numeric code designed to facilitate identification and sorting. See Chapter 4	

Reported disabilities

Column V – Disabilities	CEB equivalent
Example: Blind from Birth	Column 16 – If (1) Deaf-and-Dumb (2) Blind (3) Lunatic, Imbecile or Idiot
Transcribed as-read and discussed in Chapter 5	

Languages

Column W – Languages	CEB equivalent
Examples: English; Welsh; Both	Directly equivalent
Transcribed as-read and discussed in Chapter 7	

Appendix D - Chapman County Codes with Parish Codes for Wales

Chapman county codes are largely a superset of the ISO 3166-2:GB and BS 6879 codes identifying administrative divisions in the United Kingdom, Ireland, the Isle of Man and the Channel Islands, but covering historical divisions. They were created by Dr Colin Chapman, and are widely used by genealogists.

The Parish Codes listed below are derived from schedules generously provided by Mr Gwyndaf Williams of Bethel, Caernarfon in his capacity as publications officer for Cymdeithas Hanes Teuluoedd Gwynedd. His original schedules have been revised and extended to suit the requirements of the present study.

Upon investigation it was found that these parish codes were uniquely developed by CHT Gwynedd for its own publications. Other family history societies in Wales either use their own abbreviations for parishes, or none at all. Therefore adaptation of the Gwynedd schedules was a sound basis for the construction of alpha-numeric codes identifying all Welsh parishes.

The original schedules have been revised and a number of changes have been made. Alternative English forms and spellings have been ignored in order to save space. Formal spellings have been taken from *Rhestr o Enwau Lleoedd/A Gazetteer of Welsh Place-Names*, Elwyn Davies (ed), University of Wales Press (1967). Civil parishes have been coded and incorporated, as appropriate, whereas the original schedules covered, largely, ecclesiastical parishes. A number of townships and hamlets have been incorporated and cross-referred to the relevant parish, especially for locations within Ceredigion.

Plwyfi Ynys Môn/Parishes of Anglesey

AGY 01	Aberffro (Aberffraw)	AGY 47	Llanfflewin
AGY 02	Amlwch	AGY 44	Llanfigel
AGY 03	Biwmares	AGY 40	Llanfihangel Dinsylwy
AGY 04	Bodedern	AGY 43	Llanfihangel Tre'r-beirdd
AGY 05	Bodewryd	AGY 42	Llanfihangel Ysgeifiog
AGY 06	Bodwrog	AGY 41	Llanfihangel-yn-Nhywyn
AGY 12	Caergybi	AGY 45	Llanfwrog
AGY 07	Ceirchiog	AGY 49	Llangadwaladr
AGY 08	Cerrigceinwen	AGY 48	Llangaffo
AGY 09	Coedana	AGY 50	Llangefni
AGY 10	Gwredog	AGY 51	Llangeinwen
AGY 11	Heneglwys	AGY 52	Llangoed
AGY 31	Lanfaelog	AGY 53	Llangristiolus
AGY 33	Llanfaethlu	AGY 54	Llangwyfan
AGY 13	Llanallgo	AGY 55	Llangwyllog
AGY 14	Llanbabo	AGY 56	Llanidan
AGY 15	Llanbadrig	AGY 57	Llaniestyn
AGY 15	Llanbedr-goch	AGY 58	Llanllibio
AGY 18	Llanbeulan	AGY 59	Llannerch-y-medd
AGY 23	Llanddaniel-fab	AGY 61	Llanrhuddlad
AGY 24	Llanddeusant	AGY 60	Llanrhwydrys
AGY 25	Llanddona	AGY 62	Llansadwrn
AGY 26	Llanddyfnan	AGY 63	Llantrisant
AGY 19	Llandegfan	AGY 64	Llanwenllwyfo
AGY 20	Llandrygam	AGY 65	Llanyghenedl
AGY 21	Llandyfrydog	AGY 66	Llechgyntarwy
AGY 22	Llandysilio	AGY 67	Llechylched
AGY 27	Llanedwen	AGY 17	Niwbwrch
AGY 28	Llaneilian	AGY 68	Penmon
AGY 29	Llaneugrad	AGY 69	Penmynydd
AGY 30	Llanfachreth	AGY 70	Penrhosllugwy
AGY 32	Llan-faes	AGY 71	Pentraeth
AGY 34	Llanfair Mathafam Eithaf	AGY 72	Rhodogeidio
AGY 35	Llanfair Pwllgwyngyll	AGY 73	Rhosbeirio
AGY 37	Llanfair-yng-Nghornwy	AGY 74	Rhoscolyn
AGY 38	Llanfair-yn-neubwll	AGY 75	Trefdraeth
AGY 36	Llanfair-yn-y-cwmwd	AGY 76	Tregaeon
AGY 39	Llanfechell	AGY 77	Trewalchmai
AGY 46	Llanffinan		
	Malltraeth	gweler/see	Trefdraeth
	Porthaethwy	gweler/see	Llandysilio

Plwyfi Brycheiniog/Parishes of Breconshire

BRE 01	Aberhonddu	BRE 39	Llanfihangel Fechan
BRE 02	Aberysgir	BRE 40	Llanfihangel Nant Brân
BRE 03	Allt-Mawr	BRE 41	Llanfihangel Tal-y-llyn
BRE 04	Batel, Y	BRE 42	Llanfilo
BRE 05	Bronllys	BRE 43	Llanfrynach
BRE 76	Bryn-mawr	BRE 44	Llangamarch
BRE 07	Cantref	BRE 45	Llanganten
BRE 09	Capel Nant-ddu	BRE 46	Llangasty Tal-y-llyn
BRE 10	Capel Taf Fechan	BRE 47	Llangatwg
BRE 11	Cathedin	BRE 48	Llangenni
BRE 12	Clas-ar-Wy	BRE 49	Llan-gors
BRE 13	Crucadarn	BRE 50	Llangynidr
BRE 14	Crucywel	BRE 51	Llangynog
BRE 15	Defynnog	BRE 52	Llanhamlach
BRE 16	Dyffryn Honddu	BRE 53	Llanigon
BRE 17	Faenor, Y	BRE 08	Llanilltud
BRE 18	Garthbrenge	BRE 54	Llanllywenfel
BRE 19	Gelli, Y	BRE 55	Llansanffraid (-ar-Wysg)
BRE 06	Glyntawe (Callwen)	BRE 56	Llansbyddydd
BRE 20	Gwenddwr	BRE 57	Llanwrthwl
BRE 21	Llanafan Fawr	BRE 58	Llanwrtyd
BRE 22	Llanafan Fechan	BRE 59	Llanynys
BRE 23	Llanbedr Ystrad Yw	BRE 60	Llan-y-wern
BRE 24	Llanddeti	BRE 61	Llys-wen
BRE 25	Llan-ddew	BRE 62	Llywel
BRE 26	Llanddewi Abergwesyn	BRE 63	Maesmynys
BRE 27	Llanddewi'r-cwm	BRE 64	Merthyr Cynog
BRE 28	Llandeilo'r-fân	BRE 65	Patrisio
BRE 29	Llandyfaelog Fach	BRE 66	Penderyn
BRE 30	Llandyfaelog Tre'r-graig	BRE 67	Pen-pont
BRE 31	Llandyfalle	BRE 68	Rhyd-y-bryw
BRE 32	Llaneleu	BRE 69	Talach-ddu
BRE 33	Llanelli	BRE 70	Talgarth
BRE 34	Llanfair-ym-Muallt	BRE 71	Tirabad
BRE 35	Llanfeugan	BRE 72	Trallwng
BRE 36	Llanfihangel Abergwesyn	BRE 73	Tretŵr
BRE 37	Llanfihangel Brynpabuan	BRE 74	Ystradfellte
BRE 38	Llanfihangel Cwm Du	BRE 75	Ystradgynlais

Plwyfi Sir Gaernarfon/Parishes of Caernarfonshire

CAE 02	Aberdaron	CAE 37	Llanengan
CAE 03	Aber-erch	CAE 38	Llanfaelrhys
CAE 01	Abergwyngregin	CAE 41	Llanfaglan
CAE 04	Bangor	CAE 39	Llanfairfechan
CAE 05	Beddgelert	CAE 40	Llanfairisgaer
CAE 72	Bethesda	CAE 42	Llanfihangel Bachellaeth
CAE 07	Betws Garmon	CAE 43	Llanfihangel y Pennant
CAE 06	Betws y Coed	CAE 44	Llangelynnin
CAE 09	Bodfean	CAE 45	Llangŷan
CAE 08	Bodferln	CAE 48	Llangwnnadl
CAE 10	Botwnnog	CAE 46	Llangybl
CAE 11	Bryncroes	CAE 47	Llangystennin
CAE 12	Caerhun	CAE 49	Llaniestyn
CAE 13	Capel Curig	CAE 50	Llanllechid
CAE 14	Carnguwch	CAE 51	Llanllyfni
CAE 15	Ceidio	CAE 52	Llannor
CAE 16	Clynnog Fawr	CAE 55	Llan-rhos
CAE 17	Conwy	CAE 56	Llanrhychwyn
CAE 18	Crlcleth	CAE 53	Llanrug
CAE 19	Deinio	CAE 54	Llanrwst
CAE 20	Dolbenmaen	CAE 58	Llanwnda
CAE 21	Dolwyddelan	CAE 57	Llanystumdwy
CAE 22	Dwygyfylchi	CAE 59	Mellteyrn
CAE 23	Edern	CAE 60	Nefyn
CAE 24	Gyffin	CAE 61	Penllech
CAE 25	Llanaelhaearn	CAE 62	Penmachno & Eidda
CAE 26	Llanarmon	CAE 63	Penmorfa
CAE 27	Llanbeblig	CAE 64	Penrhos
CAE 28	Llanbedr y Cennin	CAE 65	Pentlr
CAE 29	Llanbedrog	CAE 66	Pistyll
CAE 30	Llanberis	CAE 67	Rhiw, Y
CAE 36	Llanddeiniolen	CAE 68	Trefflys
CAE 35	Llandrwog	CAE 69	Trefriw
CAE 32	Llandudno	CAE 70	Tudweiliog
CAE 33	Llandudwen	CAE 73	Waunfawr
CAE 34	Llandygai	CAE 71	Ynyscynhaearn
CAE 31	Llandygwning		
	Caernarfon	gweler/see	Llanbeblig
	Nantlle	gweler/see	Llandrwog
	Pen-y-groes	gweler/see	Llanllyfni
	Porthmadog	gweler/see	Ynyscynhaearn
	Pwllheli	gweler/see	Deinio
	Tal-y-sam	gweler/see	Llanllyfni
	Tremadoc	gweler/see	Ynyscynhaearn

Plwyfi Sir Aberteifi/Parishes of Ceredigion

CGN 81	Aberaeron	CGN 33	Llandysiliogogo (Gwenlli)
CGN 01	Aber-porth	CGN 34	Llandysul
CGN 02	Aberteifi	CGN 35	Llanfair Clydogau
CGN 03	Aberystwyth	CGN 36	Llanfairorllwyn
CGN 04	Bangor Teifi	CGN 37	Llanfihangel Genau'r-glyn
CGN 05	Betws Bledrws	CGN 39	Llanfihangel Ystrad
CGN 06	Betws Ifan	CGN 38	Llanfihangel-y-Creuddyn
CGN 07	Betws Leucu	CGN 40	Llangeitho
CGN 08	Blaenpennal	CGN 41	Llangoedmor
CGN 09	Blaen-porth	CGN 72	Llangorwen
CGN 10	Bron-gwyn	CGN 42	Llangrannog
CGN 11	Capel Cynon	CGN 43	Llangwryfyon
CGN 74	Caron-is-clawdd	CGN 44	Llangybi
CGN 75	Caron-uwch-clawdd	CGN 45	Llangynfelyn
CGN 82	Ceinewydd	CGN 46	Llangynllo
CGN 12	Cellan	CGN 47	Llanilar
CGN 13	Cilcennin	CGN 48	Llanina
CGN 14	Ciliau Aeron	CGN 49	Llanllwchaearn
CGN 15	Dihewyd	CGN 50	Llannarth
CGN 17	Eglwys Newydd (Hafod)	CGN 51	Llannerch Aeron
CGN 16	Eglwys-fach (Ysgubor-y-coed)	CGN 52	Llanrhystud
CGN 76	Elerch	CGN 53	Llansanffraid
CGN 18	Ferwig Y	CGN 54	Llanwenog
CGN 19	Gartheli	CGN 56	Llanychaearn
CGN 20	Gwnnws	CGN 57	Llechryd
CGN 77	Gwynfil	CGN 58	Lledrod
CGN 21	Henfynyw	CGN 73	Melindwr
CGN 22	Henllan	CGN 59	Mwnt
CGN 55	Llanwnnen	CGN 60	Nancwnlle
CGN 23	Llanafan	CGN 61	Penbryn
CGN 24	Llanbadarn Fawr	CGN 62	Rhostie
CGN 25	Llanbadarn Odwyn	CGN 63	Silian
CGN 26	Llanbadarn Trefeglwys	CGN 80	Trefeurig
CGN 78	Llanbadarn-y-Creuddyn Isaf	CGN 64	Trefilan
CGN 79	Llanbadarn-y-Creuddyn Uchaf	CGN 65	Tregaron
CGN 27	Llanbedr Pont Steffan	CGN 66	Tre-main
CGN 28	Llanddeiniol	CGN 67	Troed-yr-aur
CGN 29	Llanddewi Aber-arth	CGN 68	Ysbyty Cynfyn
CGN 30	Llanddewibrefi	CGN 69	Ysbyty Ystwyth
CGN 31	Llandyfriog	CGN 70	Ystrad-fflur
CGN 32	Llandygydd	CGN 71	Ystradmeurig
	Bethania	<i>gweler/see</i>	Llanbadarn Trefeglwys
	Blaen-plwyf	<i>gweler/see</i>	Llanychaearn
	Bont-goch	<i>gweler/see</i>	Ceulan-a-Maesmor
	Borth, Y	<i>gweler/see</i>	Llanfihangel Genau'r-glyn
	Bow Street	<i>gweler/see</i>	Llangorwen
	Broncastellan	<i>gweler/see</i>	Llangorwen

Bronnant	<i>gweler/see</i>	Lledrod
Capel Bangor	<i>gweler/see</i>	Melindwr
Capel Dewi	<i>gweler/see</i>	Llanbadarn Fawr
Capel Seion	<i>gweler/see</i>	Llanbadarn-y-Creuddyn Isaf
Caron	<i>gweler/see</i>	Tregaron
Ceulan-a-Maesmor	<i>gweler/see</i>	Llanbadarn Fawr
Chancery	<i>gweler/see</i>	Llanychaearn
Clarach	<i>gweler/see</i>	Llangorwen
Cnwch-coch	<i>gweler/see</i>	Llanbadarn-y-Creuddyn Isaf
Comins-coch	<i>gweler/see</i>	Llanbadarn Fawr
Cwمبرwyno	<i>gweler/see</i>	Melindwr
Cwmerfyn	<i>gweler/see</i>	Trefeurig
Cwmrheidol	<i>gweler/see</i>	Llanbadarn Fawr
Cwmsymlog	<i>gweler/see</i>	Trefeurig
Cwmystwyth	<i>gweler/see</i>	Llanfihangel-y-Creuddyn
Cwrtnwydd	<i>gweler/see</i>	Llanwenog
Cyfoeth-y-Brenin	<i>gweler/see</i>	Llanfihangel Geneu'r Glyn
Cynfelin	<i>gweler/see</i>	Llangynfelin
Cynill Mawr	<i>gweler/see</i>	Llanfihangel Geneu'r Glyn
Dôl-y-bont	<i>gweler/see</i>	Llanfihangel Geneu'r Glyn
Dyffrynpaith	<i>gweler/see</i>	Llanbadarn Fawr
Elgar	<i>gweler/see</i>	Llanfihangel Geneu'r Glyn
Faenor Isaf	<i>gweler/see</i>	Llanbadarn Fawr
Faenor Uchaf	<i>gweler/see</i>	Llanbadarn Fawr
Glandyfi	<i>gweler/see</i>	Ysgubor-y-coed
Glanywern	<i>gweler/see</i>	Llanfihangel Genau'r-glyn
Gogerddan	<i>gweler/see</i>	Trefeurig
Goginan	<i>gweler/see</i>	Melindwr
Gorwydd	<i>gweler/see</i>	Llanddewibrefi
Henllys	<i>gweler/see</i>	Llanfihangel Geneu'r Glyn
Issayndre	<i>gweler/see</i>	Llanbadarn Fawr
Llain-y-gawsai	<i>gweler/see</i>	Aberystwyth
Llanbadarn Fach	<i>gweler/see</i>	Llanbadarn Trefeglwys
Llandre	<i>gweler/see</i>	Llanfihangel Genau'r-glyn
Llanfarian	<i>gweler/see</i>	Llanbadarn-y-Creuddyn Isaf
Llannerch Aeron	<i>gweler/see</i>	Henfynyw
Llan-non	<i>gweler/see</i>	Llansanffraid
Llantrisant	<i>gweler/see</i>	Llanfihangel-y-Creuddyn
Llanwnnws	<i>gweler/see</i>	Gwnnws Uchaf
Llwyn-y-groes	<i>gweler/see</i>	Garthheli
Mydroilin	<i>gweler/see</i>	Llannarth
Nantfallen	<i>gweler/see</i>	Llangorwen
Nant-y-moch	<i>gweler/see</i>	Melindwr
Parsel Canol	<i>gweler/see</i>	Melindwr
Penllwyn	<i>gweler/see</i>	Llanbadarn Fawr
Penparcau	<i>gweler/see</i>	Aberystwyth
Penrhyn-coch	<i>gweler/see</i>	Trefeurig
Pen-y-bont	<i>gweler/see</i>	Llanfihangel Geneu'r Glyn
Pen-y-garn	<i>gweler/see</i>	Llanfihangel Geneu'r Glyn
Pontarfynach	<i>gweler/see</i>	Llanbadarn-y-Creuddyn
Ponterwyd	<i>gweler/see</i>	Uchaf
		Llanbadarn Fawr

Pontrhydfendigaid	<i>gweler/see</i>	Gwnnws Uchaf
Pont-rhyd-y-groes	<i>gweler/see</i>	Ysbyty Ystwyth
Rhydyfelin	<i>gweler/see</i>	Llanbadarn-y-Creuddyn Isaf
Rhydpennau	<i>gweler/see</i>	Llanfihangel Geneu'r Glyn
Salem	<i>gweler/see</i>	Melindwr
Staylittle	<i>gweler/see</i>	Llanfihangel Geneu'r Glyn
Swyddffynon	<i>gweler/see</i>	Lledrod
Taliesin	<i>gweler/see</i>	Llangynfelin
Tal-sarn	<i>gweler/see</i>	Trefilan
Tal-y-bont	<i>gweler/see</i>	Llanfihangel Geneu'r Glyn
Tirymynach	<i>gweler/see</i>	Llanfihangel Geneu'r Glyn
Tre Taliesin	<i>gweler/see</i>	Llangynfelin
Tre'r-ddôl	<i>gweler/see</i>	Llangynfelin
Troedyrhiw	<i>gweler/see</i>	Dihewyd
Uchayndre	<i>gweler/see</i>	Llanbadarn Fawr
Waunfawr	<i>gweler/see</i>	Llanbadarn Fawr
Ynys-las	<i>gweler/see</i>	Llanfihangel Geneu'r Glyn
Yscybor-y-coed	<i>gweler/see</i>	Eglwys Fach
Ystumtuen	<i>gweler/see</i>	Llanbadarn Fawr

Plwyfi Sir Caerfyrddin/Parishes of Carmarthenshire

CMN 01	Abergorlech	CMN 37	Llanfihangel Aberbythych
CMN 02	Abergwili	CMN 38	Llanfihangel Abercywyn
CMN 03	Aber-Nant	CMN 40	Llanfihangel Cilfargen
CMN 04	Betws, Y	CMN 41	Llanfihangel Rhos-y-Corn
CMN 05	Brechfa	CMN 39	Llanfihangel-ar-arth
CMN 06	Caerfyrddin	CMN 42	Llanfynydd
CMN 07	Castelldwyran	CMN 43	Llangadog
CMN 81	Castellnewydd Emlyn	CMN 44	Llan-gain
CMN 08	Cenarth	CMN 45	Llangathen
CMN 10	Cilmaenllwyd	CMN 87	Llangeitho
CMN 09	Cil-y-cwm	CMN 46	Llangeler
CMN 82	Cwmaman	CMN 47	Llangennech
CMN 11	Cydweli	CMN 48	Llanglydwen
CMN 12	Cyffig	CMN 49	Llangyndeyrn
CMN 13	Cynwyl Elfed	CMN 50	Llangynin
CMN 14	Cynwyl Gaeo	CMN 51	Llangynnwr
CMN 15	Eglwys Fair a Churig	CMN 52	Llangynog
CMN 16	Eglwys Gymyn	CMN 53	Llanismel
CMN 17	Egrmwnt	CMN 54	Llanllawddog
CMN 83	Felin-foel	CMN 55	Llan-llwch
CMN 18	Hendy-Gwyn	CMN 56	Llanllwni
CMN 19	Henllan Amgoed	CMN 57	Llannewydd
CMN 84	Lacharn	CMN 58	Llan-non
CMN 20	Llanarthne	CMN 59	Llanpumsaint
CMN 21	Llanboidy	CMN 60	Llansadwrn
CMN 22	Llan-crwys	CMN 61	Llansadrynin
CMN 23	Llan-dawg	CMN 62	Llansawel
CMN 24	Llanddarog	CMN 63	Llansteffan
CMN 25	Llanddeusant	CMN 64	Llanwinio
CMN 26	Llanddowror	CMN 65	Llanwrda
CMN 27	Llandeilo Abercywyn	CMN 66	Llanybydder
CMN 28	Llandeilo Fawr	CMN 67	Marros
CMN 29	Llandingad	CMN 68	Meidrim
CMN 66	Llandybie	CMN 69	Merthyr
CMN 31	Llandyfaelog	CMN 70	Myddfai
CMN 32	Llandyfeisant	CMN 71	Pen-boyr
CMN 85	Llandysilio	CMN 72	Pen-bre
CMN 86	Llandysul	CMN 73	Pencarreg
CMN 33	Llanedi	CMN 74	Pentywyn
CMN 34	Llanegwad	CMN 80	Rhydaman
CMN 35	Llanelli	CMN 75	Sanclêr
CMN 36	Llanfair-ar-y-Bryn	CMN 76	Talacharn
CMN 77	Taliaris	CMN 79	Tre-lech a'r Betws
CMN 78	Talylychau		
	Bancyfelin	gweler/see	Sanclêr
	Llanymddyfri	gweler/see	Llandingad
	Llandyfri	gweler/see	Llandingad
	Pencader	gweler/see	Llanfihangel-ar-arth

Plwyfi Sir Ddinbych/Parishes of Denbighshire

DEN 01	Abergele	DEN 32	Llanfair Talhaearn
DEN 02	Betws-yn-Rhos	DEN 33	Llanferres
DEN 03	Bryneglwys	DEN 34	Llanfihangel Glyn Myfyr
DEN 04	Capel Garmon	DEN 35	Llanfwrog
DEN 05	Cerrigydrudion	DEN 36	Llangadwaladr
DEN 06	Clocaenog	DEN 37	Llangedwyn
DEN 07	Derwen	DEN 38	Llangernyw
DEN 08	Dinbych	DEN 39	Llangollen
DEN 09	Efenechdyd	DEN 40	Llangwm
DEN 10	Eglwys-bach	DEN 41	Llangwyfan
DEN 11	Erbistog	DEN 42	Llangynhafal
DEN 12	Gresfordd	DEN 43	Llanhychan
DEN 65	Gwersyllt	DEN 44	Llanrhaeadr-ym-Mochnant Llanrhaeadr-yng- Nghinmeirch
DEN 13	Gwytherin	DEN 45	Llan-rhudd
DEN 14	Gyffylliog, Y	DEN 46	Llanrwst
DEN 15	Henllan	DEN 47	Llansanffraid Glanconwy
DEN 16	Holt	DEN 49	Llansanffraid Glynceiriog
DEN 17	Is-y-coed	DEN 50	Llansannan
DEN 48	Llan Sain Siôr	DEN 51	Llansilin
DEN 18	Llanarmon Dyffryn Ceiriog	DEN 52	Llanynys
DEN 19	Llanarmon Mynydd Mawr	DEN 53	Llysfaen
DEN 20	Llanarmon-yn-Iâl	DEN 54	Marchwail
DEN 21	Llanbedr Dyffryn Clwyd	DEN 55	Mwynglawdd
DEN 22	Llanddoged	DEN 56	Nantglyn
DEN 23	Llanddulas	DEN 57	Pentrefoelas
DEN 24	Llandegla	DEN 58	Rhiwabon
DEN 25	Llandrillo-yn-Rhos	DEN 59	Rhosllannerchrugog
DEN 26	Llandyrnog	DEN 66	Rhuthun
DEN 27	Llandysilio	DEN 60	Trefnant
DEN 28	Llanefydd	DEN 64	Waun, Y
DEN 29	Llaneilian-yn-Rhos	DEN 61	Wrecsam
DEN 30	Llanelidan	DEN 62	Ysbyty Ifan
DEN 31	Llanfair Dyffryn Clwyd	DEN 63	
	Coed-poeth	gweler/see	Wrecsam
	Maeshafn	gweler/see	Llanferres
	Ponciau	gweler/see	Rhosllannerchrugog

Plwyfi Sir y Fflint/Parishes of Flintshire

FLN 01	Allt Melyd	FLN 17	Hob, Yr
FLN 36	Bagillt	FLN 18	Llanasa
FLN 02	Bangor Is-coed	FLN 19	Llanelwy
FLN 37	Bodelwyddan	FLN 20	Llaneurgain
FLN 03	Bodfari	FLN 21	Llannerch Banna
FLN 04	Bronington	FLN 22	Nannerch
FLN 05	Broughton	FLN 23	Nercwys
FLN 38	Brynffordd	FLN 24	Owrtyn
FLN 06	Bwcle	FLN 25	Penarlag
FLN 07	Caerwys	FLN 26	Pontblyddyn
FLN 08	Chwitffordd	FLN 41	Prestatyn
FLN 09	Cilcain	FLN 27	Rhuddlan
FLN 10	Connah's Quay	FLN 42	Rhyl, Y
FLN 39	Croesesgob	FLN 28	Threapwood
FLN 11	Cwm	FLN 29	Treffynnon
FLN 12	Diserth	FLN 30	Trelawnyd
FLN 13	Fflint, Y	FLN 31	Tremeirchion
FLN 40	Ffynnongroyw	FLN 32	Treuddyn
FLN 14	Gwaunysgor	FLN 34	Wyddgrug, Yr
FLN 15	Hanmer	FLN 35	Ysgeifiog
FLN 16	Helygain		
	Bagillt	gweler/see	Fflint, Y
	Mostyn	gweler/see	Chwitffordd

Plwyfi Morgannwg/Parishes of Glamorganshire

GLA 001	Aberafan	GLA 066	Llanilltud Faerdref
GLA 002	Aberdâr	GLA 067	Llanilltud Fawr
GLA 003	Abertawe	GLA 068	Llanilltud Gŵyr
GLA 127	As Fach, Yr	GLA 069	Llanilltud Nedd
GLA 004	As Fawr, Yr	GLA 070	Llanisien
GLA 005	Baglan	GLA 071	Llanmadog
GLA 006	Barri, Y	GLA 072	Llanrhidian
GLA 007	Betws Tir Iarll	GLA 073	Llansamlet
GLA 128	Blaen-gwrach	GLA 074	Llansanffraid-ar-Elái
GLA 008	Bont-faen, Y	GLA 075	Llansanffraid-ar-Ogwr
GLA 009	Briton Ferry	GLA 076	Llansanwyr
GLA 010	Caerau a Threlai	GLA 077	Llansawel
GLA 011	Caerdydd	GLA 078	Llantridddy
GLA 012	Caerffili	GLA 079	Llantrisant
GLA 013	Casllwchwr	GLA 057	Llanwynno
GLA 014	Castell-nedd	GLA 081	Llwyneliddon
GLA 015	Castellnewydd, Y	GLA 082	Llys-faen
GLA 016	Cheriton	GLA 083	Llyswyrny
GLA 017	Cilybebyll	GLA 084	Macroes
GLA 129	Coed-ffranc	GLA 085	Margam
GLA 018	Coety	GLA 086	Merthyr Dyfan
GLA 019	Cogan	GLA 087	Merthyr Mawr
GLA 020	Creunant, Y	GLA 088	Merthyr Tudful
GLA 021	Drenewydd yn Notais	GLA 131	Nedd Isaf
GLA 022	Eglwys Brewis	GLA 132	Nedd Uchaf
GLA 023	Eglwys Fair y Mynydd	GLA 089	Nicholaston
GLA 025	Eglwys Newydd, Yr	GLA 090	Oxwich
GLA 024	Eglwysilan	GLA 091	Penarth
GLA 026	Ewenni	GLA 092	Pendeulwyn
GLA 027	Gelli-gaer	GLA 093	Pen-Llin
GLA 028	Glyncorrwg	GLA 094	Pen-Maen
GLA 029	Gwenfô	GLA 095	Pen-Marc
GLA 030	Larnog	GLA 096	Pennard
GLA 031	Lecwydd	GLA 097	Pen-Rhys
GLA 032	Llanbedr-ar-fynydd	GLA 098	Pen-Tyrch
GLA 033	Llanbedr-y-fro	GLA 133	Pen-y-bont ar Ogwr
GLA 034	Llancarfan	GLA 099	Pîl a Chynfig, Y
GLA 035	Llandaf	GLA 134	Pontypridd
GLA 036	Llanddewi	GLA 100	Port Einion
GLA 037	Llanddunwyd	GLA 101	Porthceri
GLA 038	Llandeilo Ferwallt	GLA 102	Radur
GLA 039	Llandeilo Tal-y-bont	GLA 135	Resolfen
GLA 041	Llandochau	GLA 103	Reynoldston
GLA 040	Llandochau Fach	GLA 104	Rhath, Y
GLA 042	Llandudwg	GLA 136	Rhondda, Y
GLA 043	Llandŵ	GLA 105	Rhosili
GLA 136	Llandyfodwg	GLA 106	Rhydri
GLA 045	Llanedern	GLA 137	Rhyndwyglydach
GLA 046	Llanfabon	GLA 107	Sain Dynwyd
GLA 047	Llan-faes	GLA 108	Sain Ffagan

GLA 048	Llan-fair	GLA 109	Sain Nicholas
GLA 050	Llanfihangel y Bont-faen	GLA 110	Sain Siorys
GLA 049	Llanfihangel-ar-Elái	GLA 112	Sain Tathan
GLA 051	Llanfihangel-ynys-Afan	GLA 111	Saint Andras
GLA 052	Llanfihangel-y-pwll	GLA 113	Saint Hilari
GLA 053	Llanfleiddan	GLA 114	Saint-y-Brid
GLA 054	Llan-gan	GLA 115	Sili
GLA 055	Llangatwg	GLA 116	Silstwn
GLA 056	Llangeinwyr	GLA 117	Trefflemin
GLA 057	Llan-giwg	GLA 118	Tregatwg
GLA 058	Llangrallo	GLA 119	Tregolwyn
GLA 059	Llangyfelach	GLA 138	Tre-gŵyr
GLA 060	Llangynwyd	GLA 120	Trelales
GLA 061	Llangynydd	GLA 121	Tresimwn
GLA 062	Llanharan	GLA 123	Wig, Y
GLA 063	Llanhari	GLA 124	Ystradowen
GLA 064	Llanilid	GLA 125	Ystradyfodwg
GLA 065	Llanilltern	GLA 126	Ystumllwynarth

Aberaman	gweler/see	Aberdâr
Aberpennar	gweler/see	Llanwynno
Aberpergwm	gweler/see	Castell-nedd
Blaenllechau	gweler/see	Rhondda, Y
Cilfái	gweler/see	Abertawe
Clydach	gweler/see	Rhyndwyglydach
Clydach Vale	gweler/see	Rhondda, Y
Cwmafan	gweler/see	Llanfihangel-ynys-Afan
Cwmlllynfell	gweler/see	Llan-giwg
Cwm-parc	gweler/see	Rhondda, Y
Cyfarthfa	gweler/see	Merthyr Tudful
Dowlais	gweler/see	Merthyr Tudful
Ferndale/Glynrhedyn	gweler/see	Rhondda, Y
Fochriw a Deri	gweler/see	Gelli-gaer
Gabalfa	gweler/see	Caerdydd
Gilfach-goch, Y	gweler/see	Llandyfodwg
Glandŵr	gweler/see	Abertawe
Glyn-nedd	gweler/see	Nedd Uchaf
Glyn-taf	gweler/see	Pontypridd
Hirwaun	gweler/see	Aberdâr
Llanbradach	gweler/see	Llanfabon
Llansamlet	gweler/see	Abertawe
Llwynypia	gweler/see	Rhondda, Y
Maerdy, Y	gweler/see	Rhondda, Y
Maesteg	gweler/see	Rhondda, Y
Nant-y-moel	gweler/see	Llandyfodwg
Pentre	gweler/see	Ystradyfodwg
Pentre-bach	gweler/see	Merthyr Tudful
Penydarren	gweler/see	Merthyr Tudful
Pontardawe	gweler/see	Llan-giwg
Porth, Y	gweler/see	Rhondda, Y
Sgeti	gweler/see	Abertawe
Sgiwen	gweler/see	Coed-ffranc

Tonpentre	gweler/see	Rhondda, Y
Tonypandy	gweler/see	Rhondda, Y
Treforys	gweler/see	Abertawe
Treharris	gweler/see	Merthyr Tudful
Treherbert	gweler/see	Rhondda, Y
Treorci	gweler/see	Rhondda, Y
Tylorstown	gweler/see	Rhondda, Y
Ynysowen	gweler/see	Merthyr Tudful
Ynys-y-bŵl	gweler/see	Llanwynno
Ystalyfera	gweler/see	Llan-giwg
Ystrad	gweler/see	Ystradyfodwg
Ystradfechan	gweler/see	Rhondda, Y

Plwyfi Meirionnydd/Parishes of Meirionnydd

MER 35	Aberdyfi	MER 19	Llanfihangel-y-Pennant
MER 37	Abermaw	MER 20	Llanfihangel-y-traethau
MER 01	Betws Gwerful Goch	MER 18	Llanfor
MER 02	Corwen	MER 21	Llanfrothen
MER 03	Dolgellau	MER 22	Llangar
MER 04	Ffestiniog	MER 23	Llangelynnin
MER 05	Gwyddelwern	MER 24	Llangywer
MER 08	Llandanwg	MER 25	Llansanffraid Glyndyfrdwy
MER 06	Llanaber	MER 26	Llanuwchllyn
MER 07	Llanbedr	MER 27	Llanycil
MER 11	Llandderfel	MER 28	Llanymawddwy
MER 12	Llanddwywe	MER 29	Maentwrog
MER 38	Llanddwywe	MER 30	Mallwyd
MER 09	Llandecwyn	MER 31	Pennal
MER 10	Llandrillo-yn-Edeirnion	MER 36	Penrhyndeudraeth
MER 13	Llanegryn	MER 39	Talsarnau
MER 14	Llanelltud	MER 32	Tal-y-llyn
MER 15	Llanenddwyn	MER 33	Trawsfynydd
MER 16	Llanfachreth	MER 34	Tywyn
MER 17	Llanfair		
	Aberangell	gweler/see	Mallwyd
	Abergynolwyn	gweler/see	Llanfihangel-y-Pennant
	Abermo	gweler/see	Abermaw
	Arthog	gweler/see	Llangelynnin
	Bala, Y	gweler/see	Llanfrothen
	Blaenau Ffestiniog	gweler/see	Ffestiniog
	Bryn-crug	gweler/see	Tywyn
	Corris	gweler/see	Tal-y-llyn
	Dinas Mawddwy	gweler/see	Mallwyd
	Dyffryn	gweler/see	Llanenddwyn
	Glyndyfrdwy	gweler/see	Corwen
	Harlech	gweler/see	Llandanwg
	Llwyngwrl	gweler/see	Llangelynnin

Plwyfi Sir Drefaldwyn/Parishes of Montgomeryshire

MGY 01	Aberhafesb	MGY 30	Llanidloes
MGY 02	Aberriw	MGY 31	Llanllugan
MGY 03	Betws Cedewain	MGY 32	Llanllwchhaearn
MGY 60	Carno	MGY 33	Llansanffraid-ym-Mechain
MGY 05	Castell Caereinion	MGY 34	Llanwddyn
MGY 06	Cegidfa	MGY 35	Llanwnnog
MGY 07	Cemais	MGY 36	Llanwrin
MGY 08	Ceri	MGY 37	Llanwyddelan
MGY 59	Crugion	MGY 38	Llanymynech
MGY 09	Darowen	MGY 39	Lydham
MGY 10	Drenewydd, Y	MGY 40	Machynlleth
MGY 11	Ffordun	MGY 41	Mainstone
MGY 12	Garthbeibio	MGY 04	Mallwyd
MGY 13	Hirnant	MGY 42	Manafon
MGY 14	Hyssington	MGY 43	Meifod
MGY 61	Isygarreg	MGY 44	Middleton-in-Chirbury
MGY 15	Llanyrewig	MGY 45	Mochdre
MGY 16	Llanbryn-mair	MGY 46	Penegoes
MGY 17	Llandinam	MGY 47	Pennant
MGY 18	Llandrinio	MGY 48	Pen-rhos
MGY 19	Llandysilio	MGY 49	Penystrywaid
MGY 20	Llandysul	MGY 50	Tal-y-Bont
MGY 21	Llanerfyl	MGY 51	Trallwng, Y
MGY 22	Llanfair Caereinion	MGY 52	Treberfedd
MGY 23	Llanfechain	MGY 53	Trefaldwyn
MGY 24	Llanfihangel-yng-Nghwynfa	MGY 54	Trefeglwys
MGY 25	Llanfyllin	MGY 55	Tregynon
MGY 26	Llangadfan	MGY 56	Trelystan
MGY 27	Llangurig	MGY 57	Tre'r-llai
MGY 28	Llangynog	MGY 62	Uwchygarreg
MGY 29	Llangynyw	MGY 58	Ystog, Yr
	Aberangell	gweler/see	Mallwyd
	Aberhosan	gweler/see	Penegoes
	Aber-miwl	gweler/see	Llanyrewig
	Caersŵs	gweler/see	Llanwnnog
	Cann Office	gweler/see	Llangadfan
	Derwen-las	gweler/see	Isygarreg
	Dyfngwm	gweler/see	Penegoes
	Dylife	gweler/see	Penegoes
	Melinbyrhedyn	gweler/see	Darowen
	Pont-dôl-goch	gweler/see	Llanwnnog

Plwyfi Mynwy/Parishes of Monmouthshire

MON 130	Aber-carn	MON 067	Llanfihangel Ystum Llywern
MON 001	Aberystroth	MON 065	Llanfihangel-y-fedw
MON 002	Allteuryn	MON 066	Llanfihangel-y-gofion
MON 003	Basaleg	MON 068	Llanfocha
MON 004	Bedwas	MON 069	Llanfrechfa
MON 005	Bedwellte	MON 070	Llangadog
MON 007	Betws Newydd	MON 071	Llangatwg Dyffryn Wysg
MON 006	Betws, Y	MON 072	Llangatwg Feibion Afel
MON 008	Blaenafon	MON 073	Llangatwg Lingoed
MON 009	Brynbuga	MON 074	Llangiwa
MON 010	Bryngwyn	MON 075	Llangofen
MON 011	Caer-went	MON 076	Llan-gwm Uchaf
MON 012	Caldicot	MON 077	Llangybi
MON 013	Cas-gwent	MON 078	Llangyfiw
MON 014	Casnewydd-ar-Wysg	MON 079	Llanhenwg
MON 015	Cemais	MON 080	Llanhilledd
MON 016	Cemais Comawndwr	MON 081	Llanisien
MON 017	Cendl	MON 082	Llanllywel
MON 018	Chapel Hill	MON 083	Llanofer
MON 019	Chwilgrug	MON 084	Llansanffraid
MON 020	Cilcwrri	MON 085	Llansanffraid Gwynllŵg
MON 021	Coedcernyw	MON 086	Llan-soe
MON 022	Coed-y-Mynach	MON 087	Llanwarw
MON 023	Cwmcarfan	MON 088	Llanwenarth
MON 024	Cwm-iou	MON 089	Llan-wern
MON 025	Dixton	MON 090	Llanwynell
MON 026	Drenewydd Gelli-farch	MON 091	Llanwytherin
MON 027	Eglwys Newydd ar y Cefn, Yr	MON 092	Machen
MON 028	Eglwys y Drindod	MON 093	Maerun
MON 029	Fenni, Y	MON 094	Magwyr
MON 128	Glynebwy	MON 095	Malpas
MON 030	Goetre	MON 096	Mamheilad
MON 031	Grysmwnt, Y	MON 097	Matharn
MON 032	Gwernesni	MON 098	Mounton
MON 033	Gwyndy	MON 099	Mynyddislwyn
MON 034	Hengastell	MON 100	Pant-teg
MON 035	Henllys	MON 101	Pen-allt
MON 036	Langstone	MON 102	Pen-clawdd
MON 037	Llan-arth	MON 103	Pen-hw
MON 038	Llanbadog	MON 104	Pen-rhos
MON 039	Llanbedr Gwynllŵg	MON 105	Penteri
MON 040	Llanddewi Fach	MON 131	Pont-y-pŵl
MON 041	Llanddewi Nant Hodni	MON 106	Porthsgiwed
MON 042	Llanddewi Rhydderch	MON 107	Redwick
MON 043	Llanddewi Ysgyryd	MON 108	Rhaglan
MON 044	Llanddingad	MON 109	Rhisga
MON 045	Llanddinol	MON 132	Rhymni
MON 046	Llandegfedd	MON 110	Rockfield
MON 047	Llandeilo Bertholau	MON 111	Roggiet

MON 048	Llandeilo Gresynni	MON 112	Sain Pŷr
MON 049	Llandenni	MON 114	Saint-y-brid
MON 050	Llandogo	MON 113	St Arvans
MON 051	Llaneirwg	MON 129	Tredegar
MON 052	Llanelen	MON 115	Tredelerch
MON 053	Llanfable	MON 116	Tredynog
MON 054	Llanfaches	MON 117	Trefddyn
MON 055	Llanfair Cilgedin	MON 118	Trefesgob
MON 056	Llanfair Isgoed	MON 119	Trefonnen
MON 057	Llanfarthin	MON 120	Trefynwy
MON 058	Llan-ffwyst	MON 122	Trelleck Grange
MON 059	Llanfihangel (nr Roggiet)	MON 123	Tre'r-gaer
MON 060	Llanfihangel Crucornau	MON 124	Trostre
MON 061	Llanfihangel Llantarnam	MON 121	Tryleg
MON 062	Llanfihangel Pont-y-moel	MON 125	Tyndym
MON 063	Llanfihangel Tormynydd	MON 126	Whitson
MON 064	Llanfihangel Troddi	MON 127	Ynysgynwraidd
	Cleidda	gweler/see	Llan-arth
	Coed-duon	gweler/see	Bedwellte
	Sirhywi (Sirhowy)	gweler/see	Tredegar

**Plwyfi Sir Benfro/Parishes of
Pembrokeshire**

PEM 001	Aberdaugleddyf	PEM 075	Llanrhian
PEM 002	Abergwaun	PEM 069	Llanrhuadain
PEM 003	Amroth	PEM 076	Llanstadwel
PEM 004	Angle	PEM 077	Llanstinan
PEM 002	Arbeth	PEM 078	Llantwyd
PEM 006	Begeli	PEM 079	Llantydewi
PEM 007	Beifil, Y	PEM 080	Llanwnda
PEM 008	Bont-faen, Y	PEM 081	Llan-y-cefn
PEM 009	Bosherston	PEM 082	Llanychâr
PEM 010	Boulston	PEM 083	Llanychlwydog
PEM 011	Breudeth	PEM 084	Llys-y-frân
PEM 012	Bridell	PEM 085	Loveston
PEM 013	Burton	PEM 086	Maenclochog
PEM 014	Caeriw	PEM 087	Maenorbŷr
PEM 015	Camros	PEM 088	Maenordeifi
PEM 016	Capel Colman	PEM 089	Manorowen
PEM 017	Cas-fuwch	PEM 090	Marloes
PEM 018	Cas-lai	PEM 091	Martletwy
PEM 019	Cas-mael	PEM 092	Mathri
PEM 020	Casnewydd-bach	PEM 093	Meline
PEM 021	Castell Gwalchmai	PEM 144	Milffwrdd
PEM 022	Castellhenri	PEM 094	Monkton
PEM 023	Castellmartin	PEM 095	Morfil
PEM 024	Cas-wis	PEM 096	Mot, Y
PEM 025	Cilgerran	PEM 097	Mynachlog-ddu
PEM 026	Cilgwyn	PEM 098	Mynwar
PEM 027	Cilrhedyn	PEM 099	Nash with Upton
PEM 028	Clarbeston	PEM 100	Newton North
PEM 029	Clydau	PEM 145	Neyland
PEM 030	Cosheston	PEM 101	Nolton
PEM 031	Cronwern	PEM 102	Nyfer
PEM 032	Crynwedd	PEM 103	Penalun
PEM 033	Dale	PEM 104	Penfro St Mary's
PEM 034	Dinas	PEM 105	Penfro St Michael's
PEM 035	Dinbych-y-pysgod	PEM 106	Penrhydd
PEM 036	Eglwys Lwyd, Yr	PEM 107	Prendergast
PEM 037	Eglwys Wen	PEM 108	Pwllcrochan
PEM 039	Eglwys Wythwr	PEM 109	Redberth
PEM 038	Eglwyswrw	PEM 110	Reynoldston
PEM 040	Freystrop	PEM 111	Rhoscrowdder
PEM 041	Garn, Y	PEM 112	Rhosfarged
PEM 042	Gumfreston	PEM 113	Robeston Wathen
PEM 043	Haroldston St Issells	PEM 114	Robeston West
PEM 044	Haroldston West	PEM 115	Rudbaxton
PEM 045	Hasguard	PEM 116	Sain Ffred
PEM 046	Herbrandston	PEM 117	Sain Pedrog
PEM 047	Hodgeston	PEM 120	Saint Ishel
PEM 048	Hubberston	PEM 123	Slebets
PEM 049	Hwlffordd	PEM 124	Spital

PEM 050	Jeffreyston	PEM 118	St Edrens
PEM 051	Johnston	PEM 119	St Florence
PEM 052	Lambston	PEM 121	St Lawrence
PEM 053	Lawrenny	PEM 122	St Twynnells
PEM 054	Llanbedr Felffre	PEM 125	Stackpole Elidir
PEM 055	Llanddewi Felffre	PEM 126	Steynton
PEM 056	Llandeilo	PEM 127	Talbenni
PEM 057	Llandudoch	PEM 128	Treamlod
PEM 058	Llandyfai	PEM 129	Trefdraeth
PEM 059	Llandysilio	PEM 130	Trefelen
PEM 060	Llaneilfw	PEM 131	Trefgam
PEM 061	Llanfair Nant-gwyn	PEM 132	Trefwrdan
PEM 062	Llanfair Nant-y-gof	PEM 133	Tre-groes
PEM 063	Llanfallteg	PEM 134	Treletert
PEM 064	Llanfihangel Penbedw	PEM 135	Tremarchog
PEM 065	Llanfyrnach	PEM 136	Treopert
PEM 066	Llan-gan	PEM 137	Trewyddel
PEM 067	Llangolman	PEM 138	Tyddewi
PEM 068	Llangwm	PEM 139	Uzmaston
PEM 070	Llanhywel (Carnhedryn)	PEM 140	Walton East
PEM 071	Llanisan-yn-Rhos	PEM 141	Walton West
PEM 072	Llanllawern	PEM 142	Warren
PEM 073	Llan-lwy	PEM 143	Yerbeston
PEM 074	Llanrheithan		
	Saundersfoot	gweler/see	Saint Ishel
	Solfach	gweler/see	Tre-groes
	Trecŵn	gweler/see	Llandudoch

Plwyfi Sir Faesyfed/Parishes of Radnorshire

RAD 01	Abaty Cwm-hir	RAD 26	Llanddewi-yn-Hwytyn
RAD 02	Aberedw	RAD 28	Llandeglau
RAD 03	Betws Diserth	RAD 29	Llandeilo Graban
RAD 04	Bleddfa	RAD 30	Llandrindod
RAD 05	Bochrwyd	RAD 31	Llanelwedd
RAD 06	Bryn-gwyn	RAD 32	Llanfair Llythyfnwg
RAD 07	Bugeildy	RAD 33	Llanfaredd
RAD 08	Casgob	RAD 34	Llanfihangel Dyffryn Arwy
RAD 09	Cefn-llys	RAD 35	Llanfihangel Helygen
RAD 10	Cleirwy	RAD 36	Llanfihangel Nant Melan
RAD 11	Colfa	RAD 37	Llanfihangel Rhydieithon
RAD 12	Cregrina (Craig Furuna)	RAD 38	Llangynllo
RAD 13	Diserth	RAD 39	Llanllŷr
RAD 14	Disgoed	RAD 40	Llansanffraid Cwmteuddwr
RAD 15	Eglwys Newydd, Yr	RAD 41	Llansanffraid-yn-Elfael
RAD 16	Glasgwm	RAD 42	Llansteffan
RAD 17	Llanandras	RAD 43	Llowes
RAD 18	Llananno	RAD 44	Maesyfed
RAD 19	Llanbadarn Fawr	RAD 45	Nantmel
RAD 20	Llanbadarn Fynydd	RAD 46	Norton
RAD 21	Llanbadarn Garreg	RAD 47	Pencraig
RAD 22	Llanbedr Castell-Paen	RAD 48	Pyllalai
RAD 23	Llanbister	RAD 49	Rhaeadr Gwy
RAD 24	Llanddewi Fach	RAD 50	Rhiwlen
RAD 27	Llanddewi Ystradenni	RAD 51	Saint Harmon
RAD 25	Llanddewi-yn-Heiob	RAD 52	Trefyclawdd
	Cwmdauddwr	gweler/see	Rhaeadr Gwy
	Whitton	gweler/see	Llanddewi-yn-Hwytyn

Appendix E – Members of the Hafod household (RG12/4561 f40 p3 sch 14)

Thomas James Waddingham
Head of household, age 51, Magistrate Living on his own means, born Leeds, YKS

Mrs Sarah Waddingham
Wife, age 58, born Aberystwyth, CGN

Mrs Elizabeth Davies
Mother-in-Law, Widow, age 81, Living on her own means, born Llanfihangel-y-Creuddyn Uchaf, CGN

Revd John Caleb Owen
Visitor, Single, age 32, Clerk in Holy Orders, born Llangrannog, CGN

Mr Thomas J Wetherall
Visitor, Single, age 28, Architect, born Torquay, DEV

Mr Oswald Pearson Church
Servant, age 30, Butler, born Charlton Kings, GLS

Mrs Hannah Church
Servant, age 35, Cook, born Walton West, PEM

Miss Laura Isabella Simpson
Servant, Single, age 27, Ladies Maid, born Swindon, WIL

Mr George Oliver Bremner
Servant, Single, age 18, Footman, born Halifax, Nova Scotia

Miss Mary Anne Davies
Servant, Single, age 23, Housemaid, born Whitton, RAD

Miss Sarah Neale
Servant, Single, age 20, Kitchen maid, born Kingston, GLS

Miss Mary Anne Thomas
Servant, Single, age 24, Intermediate maid, born Llethr Brith, CGN

Mrs Mary Anne Hunt
Servant, Widow, age 40, Laundress, born Crondall, HAM

Miss Sarah Jones
Servant, Single, age 17, Laundry maid, born Llanfihangel-y-Creuddyn Uchaf, CGN

Appendix F - Classification of Occupations

(derived from Occupations of the People of the United Kingdom, 1801-81, Charles Booth, *Journal of the Statistical Society*, pp 314-435 (1886))

AGRICULTURAL SECTOR (including fishing)	AG
01 Farming	AG01
Farm bailiffs, stewards	AG01.01
Farmers, graziers	AG01.02
Farmers' sons, grandsons, brother, nephews	AG01.03
Agricultural labourers, farm servants	AG01.04
Shepherds	AG01.05
Woodmen	AG01.06
Nurserymen, seedsmen, florists	AG01.06
Gardeners	AG01.07
Others in agriculture	AG01.08
Cowman	AG01.09
Dairyman/maid	AG01.10
02 Land Service	AG02
Agricultural machine proprietors, attendants	AG02.01
Land drainage service	AG02.02
03 Breeding	AG03
Horse proprietors, breeders, dealers	AG03.01
Horse breakers, keepers, grooms	AG03.02
Vet. surgeons, farriers	AG03.03
Cattle, sheep, etc. salesmen, drovers	AG03.04
Others engaged about animals	AG03.05
04 Fishing	AG04
Fishermen (iii)	AG04.01
MINING SECTOR	MN
01 Mining	MN01
Mine service	MN01.01
Coal miners	MN01.02
Iron miners	MN01.03
Copper miners	MN01.04
Tin miners	MN01.05
Lead miners	MN01.06
Miners in other or undefined minerals	MN01.07
02 Quarrying	MN02
Stone quarriers	MN02.01
Slate quarries	MN02.02
Stone and slate cutters	MN02.03
Limestone quarriers, lime burners	MN02.04
03 Brickmaking	MN03
Brickmakers	MN03.01
Sand, flint, clay, gravel workers and others	MN03.02

04 Salt and water works	MN04
Salt makers	MN04.01
Waterworks service	MN04.02
BUILDING SECTOR	BG
01 Management	BG01
Architects	BG01.01
Civil engineers	BG01.02
Surveyors (land, house, ships)	BG01.03
Contractors	BG01.04
Builders	BG01.05
02 Operative	BG02
Masons	BG02.01
Bricklayers	BG02.02
Plasterers, white-washers	BG02.03
Slaters and tilers	BG02.04
Thatchers	BG02.05
Carpenters and joiners	BG02.06
Plumbers, painters, glaziers and paperhangers	BG02.07
Gasfitters	BG02.08
Locksmiths and bellhangers	BG02.09
Others	BG02.10
03 Roadmaking	BG03
Paviors	BG03.01
Road labourers	BG03.02
Railway labourers, navvies	BG03.03
Others	BG03.04
MANUFACTURE SECTOR	MF
01 Machinery	MF01
Engine and machine makers	MF01.01
Boiler makers	MF01.02
Domestic machinery and bicycle makers	MF01.03
Weighing and measuring machine makers	MF01.04
Agricultural machine and implement makers	MF01.05
Millwrights	MF01.06
Spinning and weaving machine makers	MF01.07
02 Tools, etc	MF02
Tool makers	MF02.01
Cutlery and scissors makers	MF02.02
Pin, needle, steel pen and pencil makers	MF02.03
Gunsmiths, sword, bayonet makers and ordnance manufacture	MF02.04
Typefounders, die, seal, coin, medal makers etc	MF02.05
03 Shipbuilding	MF03
Ship, boat, barge builders, shipwrights	MF03.01
Mast, oar and block makers	MF03.02
Riggers, fitters etc.	MF03.03
Sailmakers	MF03.04

04 Iron and steel	MF04
Iron and steel manufacture	MF04.01
Anchor and chain manufacture	MF04.02
Bolt, nut, rivet, screw, nail manufacture	MF04.03
Blacksmiths	MF04.04
05 Copper, tin, lead etc	MF05
Copper and copper goods manufacture	MF05.01
Tin and tin goods manufacture	MF05.02
Lead and leaden goods manufacture	MF05.03
Zinc and zinc goods manufacture	MF05.04
Brass, bronze manufacturers, braziers	MF05.05
Wire makers, workers, weavers	MF05.06
Lamp, lantern and candlestick makers	MF05.07
Metal refiners, workers, burnishers	MF05.08
Pewter, white metal, plated ware manufacture	MF05.09
Whitesmiths	MF05.10
Others	MF05.11
06 Gold, silver and jewellery	MF06
Gold and silversmiths, jewellers	MF06.01
Lapidaries and others	MF06.02
07 Earthenware etc	MF07
Earthenware, china, porcelain manufacture	MF07.01
Glass manufacture	MF07.02
Plaster and cement manufacture	MF07.03
Slate enamelling	MF07.04
08 Coals and gas	MF08
Gasworks service	MF08.01
Others in coal, coke, peat and charcoal	MF08.02
09 Chemical	MF09
Manufacturing chemists, alkali manufacture	MF09.01
Dye and paint manufacture	MF09.02
Ink and blacking manufacture	MF09.03
Drysalts	MF09.04
Gunpowder manufacture	MF09.05
Matches, fuzees and fireworks manufacture	MF09.06
10 Furs and Leather	MF10
Furriers and skinners	MF10.01
Tanners, fellmongers, parchment makers	MF10.02
Curriers	MF10.03
11 Glue, tallow etc	MF11
Glue, size and gelatine manufacture	MF11.01
Tallow chandlers, candle and grease manufacture	MF11.02
Manufacture (continued)	
Soap boilers and makers	MF11.03
Manure manufacture	MF11.04

12 Hair etc	MF12
Hair and bristle workers	MF12.01
Brush and broom makers	MF12.02
Quill and feather dressers	MF12.03
Comb makers	MF12.04
Bone, horn, ivory, tortoiseshell workers	MF12.05
13 Wood workers	MF13
Sawyers	MF13.01
Lath, wooden fence and hurdle makers	MF13.02
Coopers, hoop makers and benders	MF13.03
Woodturners, box and case makers	MF13.04
Willow cane and rush workers	MF13.05
Cork and bark cutters and others	MF13.06
14 Furniture	MF14
Cabinet makers and upholsterers	MF14.01
Carvers and gilders	MF14.02
French polishers	MF14.03
Undertakers and others	MF14.04
15 Carriages and harness	MF15
Coach makers	MF15.01
Wheelwrights	MF15.02
Saddle, harness and whip makers	MF15.03
Railway carriage makers	MF15.04
16 Paper	MF16
Paper manufacture	MF16.01
Envelope manufacture	MF16.02
Paper box and bag makers	MF16.03
Others	MF16.05
17 Floorcloth and waterproof	MF17
Floorcloth and oilcloth manufacture	MF17.01
Japanners	MF17.02
India-rubber, gutta-percha, waterproof goods makers	MF17.03
18 Woollens	MF18
Woollen cloth manufacture	MF18.01
Worsted and stuff manufacture	MF18.02
Flannel manufacture	MF18.03
Blanket manufacture	MF18.04
Carpet, rug and felt manufacture	MF18.05
Woollen knitters	MF18.06
Others	MF18.07
Wool spinner	MF18.08
Wool weaver	MF18.09
19 Cotton and silk	MF19
Cotton and cotton goods manufacture	MF19.01
Silk and silk goods manufacture	MF19.02

Ribbon manufacture	MF19.03
Fustian manufacture	MF19.04
Crape, gauze, shawls and fancy goods (textile) manufacture	MF19.05
Weavers, spinners and factory hands (textile)	MF19.06
20 Flax, hemp etc	MF20
Flax, linen and damask manufacture	MF20.01
Canvas and sailcloth manufacture	MF20.02
Sacking and bag manufacture	MF20.03
Hemp, jute and cocoa-fibre manufacture	MF20.04
Rope, twine and cord makers	MF20.05
Net makers	MF20.06
Mat makers	MF20.07
Others	MF20.08
21 Lace	MF21
Lace manufacture	MF21.01
Embroiderers	MF21.02
Thread manufacture	MF21.03
Tape manufacture	MF21.04
Trimming manufacture	MF21.05
Artificial flower makers and others	MF21.06
22 Dyeing	MF22
Fullers	MF22.01
Cotton and calico printers, dyers and bleachers	MF22.02
Wool, woollen goods, dyers, printers	MF22.03
Silk dyers, printers (xx)	MF22.04
Dyers, printers, scourers, bleachers (undefined)	MF22.05
23 Dress	MF23
Tailors and clothiers	MF23.01
Milliners and dressmakers	MF23.02
Shirtmakers and seamstresses	MF23.03
Hosiery manufacture	MF23.04
Hat manufacture	MF23.05
Straw hat, bonnet and plait manufacture	MF23.06
Glove manufacture	MF23.07
Shoe and boot makers (cordwainer)	MF23.08
Pattern and clog makers	MF23.09
Others	MF23.10
24 Sundries connected with dress	MF24
Accoutrement makers	MF24.01
Umbrella, parasol and stick makers	MF24.02
Button makers	MF24.03
Leather goods manufacture	MF24.04
25 Food preparation	MF25
Oil millers, oil cake makers	MF25.01
Corn millers	MF25.02
Sugar refiners	MF25.03

Mustard, vinegar, pickles manufacture	MF25.04
26 Baking	MF26
Bakers	MF26.01
Confectioners and pastry cooks	MF26.02
27 Drink preparation	MF27
Maltsters	MF27.01
Brewers	MF27.02
Distillers, rectifiers	MF27.03
Ginger beer, mineral water manufacture	MF27.04
28 Smoking	MF28
Tobacco manufacture	MF28.01
Tobacco pipe and snuffbox manufacture	MF28.02
29 Watches, instruments and toys	MF29
Watch and clock makers	MF29.01
Philosophical and surgical instruments and electrical apparatus makers	MF29.02
Musical instrument makers	MF29.03
Fishing tackle and toy makers	MF29.04
30 Printing and book-binding	MF30
Printers	MF30.01
Lithographers and copper-plate printers	MF30.02
Bookbinders	MF30.03
31 Unspecified	MF31
Manufacturers, managers, superintendents	MF31.01
Apprentices	MF31.02
Engine drivers, stokers, firemen (in manufacturing)	MF31.03
Machinists, machine workers	MF31.04
Artisans, mechanics	MF31.05
Factory labourers	MF31.06
TRANSPORT SECTOR	TS
01 Warehouses and docks	TS01
Harbour, dock, wharf and lighthouse service	TS01.01
Warehousemen (not Manchester)	TS01.02
Meters, weighers	TS01.03
Messengers, porters and others	TS01.04
02 Ocean navigation	TS02
Pilots	TS02.01
Seamen (merchant service)	TS02.02
Steam navigation service	TS02.03
Ship stewards and cooks	TS02.04
Boatmen-on-seas	TS02.05
03 Inland navigation	TS03
Canal and inland navigation service	TS03.01
Bargemen, lightermen, watermen and others	TS03.02

04 Railways	TS04
Railway officials and servants	TS04.01
Railway engine drivers, stokers	TS04.02
05 Roads	TS05
Toll collectors	TS05.01
Livery stable keepers, cab and bus owners	TS05.02
Cabmen, flymen. Coachmen	TS05.03
Carmen, carriers, carters and draymen	TS05.04
Tramways service	TS05.05
Wheelchair proprietors, attendants, and others	TS05.06
DEALING SECTOR	DS
01 Coals	DS01
Coal merchants and dealers	DS01.01
Coal heavers and labourers	DS01.02
02 Raw materials	DS02
Timber merchants, wood dealers	DS02.01
Hop merchants, dealers	DS02.02
Hay, straw and chaff dealers	DS02.03
Corn, flour and seed merchants, dealers	DS02.04
Woolstaplers	DS02.05
03 Clothing materials	DS03
Cotton and calico warehousemen, dealers	DS03.01
Manchester warehousemen	DS03.02
Cloth, worsted and stuff merchants, dealers	DS03.03
Silk merchants, dealers	DS03.04
Wool merchant	DS03.05
04 Dress	DS04
Drapers, linen, drapers, mercers	DS04.01
Hosiers, haberdashers	DS04.02
Hatters	DS04.03
Clothes dealers	DS04.04
Boots and shoes	DS04.05
05 Food	DS05
Butchers, meat salesmen	DS05.01
Poulterers, game dealers	DS05.02
Fishmongers	DS05.03
Milksellers, cowkeepers	DS05.04
Cheesemongers, buttermen	DS05.05
Provision curers, dealers	DS05.06
Grocers, tea dealers	DS05.07
Greengrocers, fruiterers, potato dealers	DS05.08
Others dealing in food	DS05.09
Oil and colourmen	DS05.10

06 Tobacco	DS06
Tobacconists	DS06.01
07 Wines, spirits and hotels	DS07
Wine and spirit merchants	DS07.01
Inn and hotel keepers, publicans	DS07.02
Beersellers	DS07.03
Cellarmen	DS07.04
08 Lodging and coffee houses	DS08
Lodging and boarding-house keepers	DS08.01
Coffee and eating-house keepers	DS08.02
09 Furniture	DS09
Furniture brokers, dealers	DS09.01
Dealers in pictures and works of art	DS09.02
Pawnbrokers	DS09.03
10 Stationery and publications	DS10
Stationers, law stationers	DS10.01
Publishers, book-sellers, librarians	DS10.02
Newsagents	DS10.03
Music publishers, sellers	DS10.04
Ticketwriters, billstickers	DS10.05
11 Household utensils and ornaments	DS11
Earthenware, china and glass dealers	DS11.01
Ironmongers, hardwaremen	DS11.02
Gold and silversmiths, jewellers	DS11.03
12 General Dealers	DS12
General shopkeepers, dealers	DS12.01
Hawkers, hucksters, costers	DS12.02
Marine store and rag dealers	DS12.03
13 Unspecified	DS13
Merchants	DS13.01
Brokers, agents, factors	DS13.02
Auctioneers, appraisers, valuers, house agents	DS13.03
Salesmen and buyers	DS13.04
Commercial travellers	DS13.05
INDUSTRIAL SERVICE SECTOR	IS
01 Banking, insurance, accounts	IS01
Bankers	IS01.01
Bank service	IS01.02
Insurance service	IS01.03
Accountants	IS01.04
Commercial clerks	IS01.05
Officers of commercial companies and others	IS01.06

02 Labour	IS02
General labourers	IS02.01
PUBLIC SERVICE AND PROFESSIONAL SECTOR	PS
01 Administration (central)	PS01
Civil service officers and clerks	PS01.01
Civil service messengers	PS01.02
Post office	PS01.03
Telegraph, telephone service	PS01.04
East India service	PS01.05
02 Administration (local)	PS02
Municipal, parish, union, district officers	PS02.01
Other local and county officials	PS02.02
03 Administration (sanitary)	PS03
Town drainage and scavenging	PS03.01
04 Army	PS04
Army officers (effective and retired)	PS04.01
Soldiers and NCOs	PS04.02
Militia yeomanry, volunteers	PS04.03
Army pensioners	PS04.04
05 Navy	PS05
Navy officers (effective and retired)	PS05.01
Seamen, RN	PS05.02
Royal Marines (Officers and men)	PS05.03
Coastguards	PS05.04
RN Reserve	PS05.05
Navy pensioners	PS05.06
06 Police and Prisons	PS06
Prison officers	PS06.01
Police	PS06.02
07 Law	PS07
Judges, barristers, solicitors	PS07.01
Public Service and Professional Sector (continued)	
Law students	PS07.02
Law clerks and others	PS07.03
08 Medicine	PS08
Physicians, surgeons, practitioners	PS08.01
Medical students, assistants	PS08.02
Chemists, druggists	PS08.03
Dentists	PS08.04
Midwives	PS08.05
Medical services	PS08.06
09 Art and amusement (Painting)	PS09
Painters (artists)	PS09.01

Sculptors (artists)	PS09.02
Engravers (artists)	PS09.03
Photographers	PS09.04
Art students	PS09.05
Figure and image makers	PS09.06
Animal and bird preservers, naturalists	PS09.07
10 Art and amusement (music etc)	PS10
Actors	PS10.02
Art, music and theatre service	PS10.03
Performers, showmen, exhibition service	PS10.04
Billiards, cricket and other games service	PS10.05
11 Literature	PS11
Authors, editors, journalists	PS11.01
Reporters, shorthand writers	PS11.02
12 Science	PS12
Engaged in scientific pursuits	PS12.01
Literary and scientific instruction service	PS12.02
13 Education	PS13
Schoolmasters	PS13.01
Teachers, professors, lecturers	PS13.02
School service	PS13.03
14 Religion	PS14
Clergymen (Established Church)	PS14.01
Roman Catholic priests	PS14.02
Ministers and priests of other denominations	PS14.03
Missionaries and service readers	PS14.04
Theological students	PS14.05
Nuns, sisters of charity	PS14.06
Church, chapel, cemetery officers and servants	PS14.07
DOMESTIC SERVICE SECTOR	DO
01 Indoor servants	DO01
Indoor servants	DO01.01
Inn and hotel servants	DO01.02
College, club, hospital, institution and other servants	DO01.03
02 Outdoor service	DO02
Coachmen and grooms	DO02.01
Gardeners	DO02.02
Park, lodge and gatekeepers	DO02.03
Gamekeepers	DO02.04
03 Extra service	DO03
Cooks (not private)	DO03.01
Charwomen	DO03.02
Office keepers (not government)	DO03.03
Washing and bathing service	DO03.04

Hairdressers, wig makers	DO03.05
Chimney sweeps	DO03.06
PROPERTY OWNING, INDEPENDENT	PO
Landowners	PO01
Houseowners	PO02
Mine owners	PO03
Ship and boat owners	PO04
Persons of independent means	PO05
INDEFINITE	IN
Persons of indefinite occupation	IN01
Vagrants, paupers, lunatics, prisoners	IN02
DEPENDENT CLASS	