

# **NATIONAL PARISH REGISTER DATA: AN EVALUATION OF THE COMPREHENSIVENESS OF THE AREAL COVER**

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There has been considerable debate in recent years on the value of John Rickman's parish register abstracts (PRAs) as the basis for the analysis of population trends during the eighteenth century; the general consensus is that the problems involved in using these data are so great that little reliance can be placed on estimates based on them.<sup>1</sup> Most of these criticisms have focused on the limitations of the parochial record of vital events and only indirectly on the comprehensiveness of the survey. The latter can also influence the accuracy of the PRA record, particularly if the parishes making returns vary from one census date to another, thus affecting the comparability of the tabulations and the interpretation of trends based on them. This paper examines the problem of variation in areal coverage, the attempts made by Rickman to improve his survey and the anomalies that arise when the data are analysed at different scales.

## **The Parish Register Abstracts (PRAs)**

The data tabulated in the PRAs of 1801-1841 were based on returns made by the parish clergy. As Glass points out, most of the original returns were destroyed in 1904, which makes any enquiry into the accuracy of the data more difficult.<sup>2</sup> Using the summary tabulations in the census volumes three methods of evaluation are possible. First, the degree of consistency among the PRA data themselves can be examined; second, the PRA data can be compared with fresh aggregations derived from extant registers; and third local surveys of parochial registration can be used to derive precise sample levels of error that can then be applied to the summary data.<sup>3</sup> All three approaches need to be employed before reliable conclusions can be drawn, but the first is the obvious starting point.

The first PRA, for the 1801 census, included information on baptisms and burials for the first year of each decade from 1700-80, and for individual years from 1780-1800. Marriage data, however, were provided for each year from 1754-1800. Returns which included defective registers were noted, but no precise details of any adjustments to the data were recorded, even though some is known to have occurred.<sup>4</sup> Each of the census returns from 1811, 1821, 1831 and 1841 also included a PRA,

these volumes summarised the vital events of the preceding decade as recorded in the parish registers; in each case details are given of the number of places making returns and in 1831, a full survey of surviving registers and of any deficiencies in their records was collected. In the first four PRAs, the areal units for which data are given are England and Wales; counties; and hundreds, boroughs and liberties. In 1841, the units are the ancient and registration counties, and poor law districts, hence it is only at a county level that comparisons are possible with earlier data.

This change in the nature of the collection unit highlights one problem that is universal to all the series of vital events recorded in the PRAs. Namely, did Rickman include the same parishes on all occasions or do the records apply to slightly different areas in each PRA? The comprehensiveness of the areal cover may be considered crucial in assessing the representativeness of these statistics and critical in the interpretation of trends of vital events for administrative areas or counties. This issue can be illustrated by reference to Rickman's record of marriages in a number of counties in the Midlands and Welsh borders.

### **The areal cover**

An incomplete areal cover, and particularly variations in the completeness of cover from one census date to another, can cause most perplexing problems of interpretation in the construction of aggregate trends of vital events. Unless it is known which units provided returns, it is difficult to decide whether an increase in the number of marriages at two successive dates should be attributed to the addition to the record of one or more parishes, or to an increase in nuptiality. Some indication of changes in the extent of coverage can be gained from the total number of registers returned at each census. There were, however, variations in the degree of coverage both from one PRA to the next and from one region to another, as can be illustrated from the data Rickman tabulated.

Rickman was initially uncertain how many parish returns he needed to collect a complete cover. Consequently, close attention to the commentary and places making returns included in each PRA is necessary, if his progressive attempts to improve the coverage of the survey are to be assessed. This procedure can however prove rather confusing as different figures are presented in different parts of the abstracts at the same date and from one date to the next.

In 1801, Rickman's tables indicate that for England and Wales he was expecting 11634 returns to achieve 100 per cent coverage and that the actual returns were 1143 short. In the commentary to the volume these figures are changed to 11655 and 1164 respectively and presumably include supplementary information. He notes that some 389 of the apparently missing records had been included with those already returned (mostly chapelries included with the parish of the mother church), whilst other returns reached Rickman too late for inclusion in the county tables of the PRA. Some 495 of these late returns are included in a Supplement to the volume, printed and published along with the tabulations, but prepared after they had been completed.<sup>5</sup>

The Supplement presents annual totals of vital events for all the late entries and while footnotes document which parishes are included and which remain outstanding, it is impossible to extract from the listings details of annual marriages for individual parishes. Some indication can be gained from these tables of regional variation in non-returns, but it is inconclusive.<sup>6</sup> In the commentary to the 1801 census it is claimed that there were finally only 280 places in England and Wales for which no returns were received for the period 1754-1800, and it is claimed that 'these are almost without exceptions Chapelries, of whose Registers many are supposed to be included in the Returns made from the Registers of their respective Mother Churches.'<sup>7</sup>

When Rickman looked back at his 1801 experience in collecting parish register data, he realised that the coverage problems arose principally from uncertainty, both on his part and on the part of the clergy who transcribed the returns, as to which units (and therefore how many units) were involved. Where the parish was large and contained several sub-units, should one composite return be made for the whole parish or should there be several separate returns, one for each chapelry or township? Consequently, prior to the 1811 survey, Rickman and his lieutenants analysed national and county maps (the details of which are not specified), and wrote letters to 2100 clergy and overseers of the poor, in an attempt to determine precisely the number of returns that might be expected. This led to a further modification to the 1801 assessment from 11634 to 11065 expected returns of which 10643 had been actually received. As a result, Rickman was convinced by 1811 that he had solved this problem and he stated that 'the situation now is one in which the defect can scarcely exceed 3 or 4 in 11,159 registers of Churches and Chapels herein enumerated.'<sup>8</sup> The improvement in coverage was maintained in 1821 and 1831; the number of places making returns differs as a result of ecclesiastical reorganisations, but on each occasion the proportion of non-returns (under 0.1 per cent) is impressively low. The slight discrepancy between the tabulated figures and the commentaries in 1811 and 1821 is due to the omission of dissenting registers included in the overall tables. It would appear therefore that in 1811 and subsequently, areal coverage is unlikely to be the cause of any significant inaccuracy in the PRA data; the problem is restricted to the period 1754-1800 and here is less widespread than might be thought.

The variations from region to region in areal coverage can be illustrated from selected West Midland and Welsh borderland counties. Tables 1a and b show that in 1801, prior to the collection of late returns, the percentage of supposed non-returns varied from nil in Shropshire to 36.5 per cent in Denbigh. The Supplement shows that much lower percentages prevailed after corrections had been applied (except in Shropshire and Radnor).<sup>9</sup> Closer analysis is necessary before these two anomalies can be explained, though continued overestimation of the expected number of units seems the most likely reason. Interestingly, four of these counties, Warwickshire, Worcestershire, Herefordshire and Radnorshire are included by Sylvester in the area of Britain dominated by single-township parishes. The remaining counties are characterised by large parishes with many townships, with as many as six townships per parish occurring

**Table 1a: Regional Variations in places making returns to the PRA for selected counties.**

	1801			1811			1821			1831		
	r	nr	t	r	nr	t	r	nr	t	r	nr	t
<b>Industrialised Counties</b>												
Stafford	165	22	187	184	—	184	183	—	183	180	3	183
Warwick	191	39	230	209	—	209	209	—	209	210	1	211
<b>Borderland Counties</b>												
Cheshire	110	32	142	130	—	130	131	—	131	125	—	125
Hereford	206	51	257	225	—	225	225	—	225	223	1	224
Shropshire	212	—	212	228	—	228	235	—	235	234	—	234
Worcester	191	17	208	197	—	197	203	—	203	199	—	199
<b>Welsh Counties</b>												
Denbigh	59	34	93	60	—	60	60	—	60	58	—	58
Montgomery	46	4	50	51	—	51	53	—	53	53	—	53
Radnor	50	9	59	53	—	53	52	—	52	52	—	52

**Source:** PRA Census Vols 1801-31. Supplement not included.

**Table 1b: Percentage non-return in 1801, excluding and including the Supplement.**

	% nr	
	Excluding Supplement	Including Supplement
<b>Industrialised Counties</b>		
Stafford	11.7	3.9
Warwick	16.9	4.3
<b>Borderland Counties</b>		
Cheshire	22.5	2.9
Hereford	19.8	5.5
Shropshire	—*	10.2
Worcester	8.0	4.8
<b>Welsh Counties</b>		
Denbigh	36.5	3.0
Montgomery	8.0	—
Radnor	15.2	15.2

**Source:** PRA Census Vols 1801 County reports and Supplement p. 449. \*Shropshire records no non-returns in the County section of the census. However in the supplement 24 returns are listed as outstanding. p. 450.

**Notes:** r = return                      nr = non-return                      t = total

in Cheshire.<sup>10</sup> Although the high percentage non-return in Cheshire and Denbighshire may result from this contrast, there is only a weak and non-significant correlation between the incidence of multiple townships in parishes of a county and the level of non-return of register data.<sup>11</sup> After 1801 there appears to be a marked improvement in areal coverage, suggesting that the PRAs from this date are virtually complete.

More evidence of variation in areal coverage is evident when Rickman's data are considered at a sub-county level. This can be illustrated for Shropshire and suggests some evidence of inconsistency in the PRA data. Tables 2a and b compare the summary figures presented for the county with the aggregated totals of places making returns for each constituent hundred and borough. Apparent discrepancies in areal coverage appear to emerge from these tabulations, with consistently more parishes recorded as making returns for the hundreds than were listed in the county summary. If this discrepancy were serious, consistent disagreement would be expected in the actual number of marriages recorded in any given year. This is not the case. While discrepancies do exist between the annual totals, and these are inevitably more frequent from 1754-1800 than in the later period, they follow no consistent pattern that could be related to variations in areal coverage.

**Table 2a A comparison of places making marriage returns for Shropshire 1801-31.**

	1801	1811	1821	1831
Summary tabulation	212(236)	230	235	234
Aggregated total from individual hundreds	215	233	238	241
Percentage difference	+1.4(-8.8)	+1.3	+1.3	+2.9

**Source:** PRA Census Volumes 1801-31.

(-) Figure derived from the Supplement to the 1801 Abstract.

**Table 2b Variation in the record of marriage frequency for Shropshire 1756-1830.....**

	County Summary Tabulation	Aggregated total (Hundreds)	Years difference occurs	% difference
1756-60	4587	4728	5	3.1
1761-70	11026	10250	3	7.0
1771-80	10808	10803	1	0.05
1781-90	11038	11046	2	0.07
1791-1800	11704	11697	3	0.05
1801-1810	13536	13536	—	—
1811-1820	13613	13613	—	—
1821-1830	15763	15763	—	—

**Source:** PRA Census Volumes 1801-31.

On sixteen occasions in the period 1754-1800 the number of marriages recorded in the county summary differ from the aggregated totals for the individual hundreds. These range from a discrepancy of +800 marriages in 1764 (a probable transcription error) to -33 in 1755. Errors are continuous from 1755-61, when the summary consistently records annual frequencies lower than the totals for the hundreds. Thereafter to 1800, there is a marked improvement and, with the exception of 1764, the variation is both smaller and more erratic in occurrence.<sup>12</sup> In the following thirty years to 1830 only on two occasions are there discrepancies. In 1821, the summary list four additional marriages and in 1822 the same listing omits twenty marriages. Unfortunately it is impossible to ascertain why (or how) these differences came about. It is worthy of note that the period of continuous disagreement (1755-61) coincided with the period when Rickman records certain registers as defective.<sup>13</sup> It may well be that some adjustments, which were not included in the summary totals, were made to the hundred totals to offset the loss of records. It would be unwise however to conclude too much from such a coincidence.<sup>14</sup>

The impact of this annual variation is illustrated in Table 2b. The size of the difference in 1764 tends to overemphasise the degree of discrepancy in the decade 1761-70, but thereafter the percentage difference is so slight, that it is probably little more than a random element. This analysis of the Shropshire tabulations suggests that within Rickman's statistics there are inconsistencies at a sub-county level which should be recognised at the outset. It should be stressed however, that these figures provide only general indications, peculiar to one county and may, as a result, be atypical. It seems likely that comparable variation both in areal coverage and annual totals of marriage exists in other areas and may well be greater in more industrial settings where parochial registration was potentially more inaccurate. In aggregate, it appears that the limitations of the PRAs in terms of areal coverage are much less serious than might have been thought. The nineteenth century data is virtually complete, and the 1754-1800 coverage is reasonably accurate if used with care.

The problem of areal coverage increases significantly however at the scale of the individual hundred or borough. Here, it is clear that while at the aggregate level the totals of returning parishes appear consistent, at the local level, there is some variation in the allocation of parishes and chapelries to hundreds and boroughs over time. The effect of this can be to alter both the numbers and trend of vital events, for with smaller annual numbers of baptisms, marriages or burials the addition or omission of one or more parishes can greatly modify the record. This point can be illustrated from the Shropshire tabulations.

Of the sixteen hundreds and boroughs in the county only two, Ludlow and Chirbury, have identical numbers of returning parishes from 1801-1831. The remaining fourteen areas either gain or lose parishes in successive PRA returns. In some cases, this has little effect on either the actual number of events recorded or the trend, for the increase or decrease in returning places can result from a chapelry making an independent return at one date and then being included subsequently with the records of its associated mother parish. This occurs in the

hundred of Ford in 1811, when the chapelry of Ministerley is included in the parish return of Westbury, although it is returned separately on other occasions. This type of adjustment is fairly frequent but it should not be assumed to be the sole reason for variation in numbers of PRA returns at different census dates. Seven of the administrative areas in the county gained or lost one parish. Stottesdon first gained and then lost a parish but in the same period (1801-1831) the numbers of returning parishes in Shrewsbury rose from 7 to 15 and in Munslow from 20 to 27.

The gains and losses for the county as a whole do not in fact balance out because of variation in the total numbers of returning places at each census date and in certain cases parishes are only present in the returns for part of the total period.

The solution to the problem of variation in local areal cover is not straightforward. Two approaches can be attempted. The easy method is simply to restrict enquiry at the local scale to those hundreds and boroughs which do make consistent returns over time. Alternatively, where there is variation that may influence the resulting tabulations, the only solution is to attempt to standardise the record through time, using either local registers or an estimation procedure based on the expected annual average record of events for the parishes concerned. This is necessary because the PRAs give no detail of individual parish returns. In such circumstances, extreme care must be taken to ensure that at the local level the PRA record is documenting the same parishes and chapelries throughout the period. This problem however only arises when a comprehensive record based on successive PRAs is required.

## **Conclusion**

This paper has discussed one of the more obvious limitations of the PRA data, that of areal coverage. It has shown that Rickman made progressive attempts to improve the completeness of his record, but in so doing created problems for anyone wishing to treat the PRAs as a continuous record dealing with identical areas. Within the PRA volumes certain inconsistencies, which pose minor problems to the user, are evident and these need to be examined further for the country as a whole. The major difficulty in the PRAs lies in ensuring that, at the local scale, the record of vital events refers consistently to the same areas. This scale distinction is important in the interpretation of trends, for it means that while analysis at the county level may be undertaken satisfactorily, acknowledging the above limitations, at the local level this is impossible without very careful examination and adjustment of the record.

The PRAs present other more intractable problems to the user and these also need to be resolved. It is not known how far this published record is an accurate or complete transcription of the actual parochial registers in use during the period. Neither is the extent of underregistration of events fully established. This is a problem common to both the national published figures and to the local statistics currently being collected from parish registers. Finally, the PRAs appear very deficient in records of dissenting congregations. This further limits their comprehensiveness. These issues await further research and in such circumstances the PRAs must be regarded as far from perfect and requiring considerable caution in their interpretation.

## NOTES

1. The debate on demographic change and the use of Rickman's statistics figures largely in the literature of historical demography. A summary of the arguments can be found in M. W. Flinn, **British population growth 1700-1850**, Studies in Economic History: papermac, 1970. The problems of population estimation are discussed by N. F. R. Crafts, 'Eighteenth century local population studies in the context of aggregate estimates for England and Wales,' **LPS**, vol. 13, Autumn 1974, pp. 19-31. Reference to Rickman's data can be found in: D. V. Glass, 'Population movements 1700-1850, in D. V. Glass and D. E. C. Eversley, **Population in History**, Arnold, 1965, pp. 221-46 and J. D. Chambers **Population, economy and society in pre-industrial England**, O.U.P., 1972, pp. 64-66 and pp. 113-114.
2. D. V. Glass, p. 221. Full details are given in M. Drake, 'The census 1801-1891 in E. A. Wrigley, **Nineteenth century Society: essays in the use of quantitative methods for the study of social data**, C.U.P., 1973, pp. 7-43. Drake notes that two bodies of manuscript material exist.
  - (i) In the PRO Home Office Papers (HO 71) give for every parish, the number of baptisms, burials and marriages for each year 1821-30: age at death (in years 1-100) for each year 1813-30: the annual average number of baptisms, burials and marriages not entered in the Church of England parish registers, with specific comments 1821-30: the number of burials entered in non Anglican and Anglican registers of burials in non Anglican grounds each year 1813-30: the number of illegitimate children differentiated by sex in 1830.
  - (ii) In the BM are two large folio MSS volumes (BM Additional MSS 6896 and 6897) relating to the answers relative to the non-entry of baptisms, burials and marriages in the parish registers. Partially incomplete, volume 1 deals with population enumeration, volume 2, with the PRA information, both relate to 1811.
3. Very few published studies exist dealing with this problem. The classic article on parochial registration is that by J. T. Krause, 'The changing adequacy of English Registration 1690-1837,' in D. V. Glass and D. E. C. Eversley, pp. 379-93. Razzell has recently examined the underregistration of baptisms in parochial registers and applied these findings to national estimates. See P. E. Razzell, 'The evaluation of baptism as a form of birth registration through the cross matching of census and parish register data,' **Population Studies**, vol. 26, 1972, pp. 121-147.
4. D. V. Glass, p. 222.
5. D. V. Glass, pp. 222-3.
6. The Supplement is appended to the end of the 1801 PRA, it records a second attempt by Rickman to collect late entries and is prefaced by a few remarks on the completeness of the first survey. See **PRA Census 1801**, publ. 1802, p. 449 ff.
7. Some indication of regional variation in non-return and hence areal coverage is evident in the Supplement but it fits no clear pattern. For example, Cheshire made 14 additional returns and four remained outstanding, **Ibid** p. 451:
  - Warwickshire made 9 additional returns and 9 remained outstanding, p. 453;
  - Staffordshire made 6 additional returns and 7 remained outstanding, p. 453;
  - Worcestershire made 5 additional returns and 10 remained outstanding, p. 453;
  - Shropshire made no extra returns and 24 remained outstanding, p. 452.
8. **Ibid** p. 449.
9. **PRA Census 1811**, publ. 1812, p. xix.
10. The parish total for each county when the Supplement is included would be Staffordshire 178, Warwickshire 209, Cheshire 138, Herefordshire 288, Shropshire 236, Worcestershire 206, Denbigh 66, Montgomery 54, Radnor 59.



11. D. Sylvester, **The rural landscape of the Welsh borderland**, Macmillan, 1969, pp. 166-171.
12. Using Sylvester's data, a Spearman's rank correlation coefficient was computed to see whether there was a relationship between the number of townships per parish by county and the level of non-return of parish register details. The coefficient (0.33) showed no significant relationship at the 95 per cent. confidence level. It therefore appears that inaccuracy of areal coverage does not simply arise from the incidence of multiple townships in parishes.
13. The totals in the Summary are **less than** those for the aggregated hundreds in 1765 (1), 1783 (15), 1800 (6) and **greater than** in 1770 (5), 1777 (5), 1785 (7), 1791 (8), 1792 (5).
14. D. V. Glass, p. 221, has noted that Rickman chose to estimate the number of marriages omitted from the registers when the record returned was incomplete. Unfortunately, no record was kept of where such estimates were included though the method used to calculate them, from the numbers in each of the preceding and succeeding years, is known. Conceivably, the pattern of variation described in the text may be related to the years in which such estimations were included, but this is unsubstantiated speculation that must await further research.

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