

LITERACY AND GEOGRAPHICAL MOBILITY IN NINETEENTH CENTURY PROVINCIAL FRANCE: SOME EVIDENCE FROM THE DÉPARTEMENT OF ILLE-ET-VILAINE

Michael J. Heffernan

Michael J. Heffernan is a lecturer in geography at Loughborough University of Technology. His doctorate from the University of Cambridge was concerned with the emergence and impact of literate culture in nineteenth century France with particular reference to the production and circulation of popular reading material.

Introduction

The development of a French literate culture and the changing scale and pattern of French geographical mobility have been objects of considerable interest over many years. Recent computer-assisted research has revealed a great deal about the nature and development of French literate culture. We know that literacy developed slowly and gradually from the seventeenth to the nineteenth century over a consistent geographical pattern. Throughout this period, males were 10 to 20 per cent more literate than their female contemporaries (table 1 and figures 1 and 2).¹ Research has also uncovered a considerable amount about the increasing scale and the changing nature of French population mobility, particularly the movement from country to town, and has also provided new insights about the importance of migration within the broader social, economic and political development of modern France.² Although it is often tacitly assumed that rising popular literacy rates must have been connected with increasing mobility, such a relationship has never been clearly demonstrated in France. For the most part, studies of literacy and migration have been undertaken independently of one another.³ Using evidence from Ille-et-Vilaine, a *département* in western France, this paper examines whether improved literacy and increases in the levels of geographical mobility during the nineteenth century were in fact related.

Sources

The rapidity of social, economic and political change in nineteenth century Europe stimulated a major increase in the measurement and analysis of population statistics, particularly those relating to social, moral and educational attributes.⁴ In France, this concern was fuelled by a growing sensitivity to the relative slowness of French population growth and by broader political conflict between the Roman Catholic church and an increasingly secular civil state over the question of educational control. This Gallic preoccupation with social and

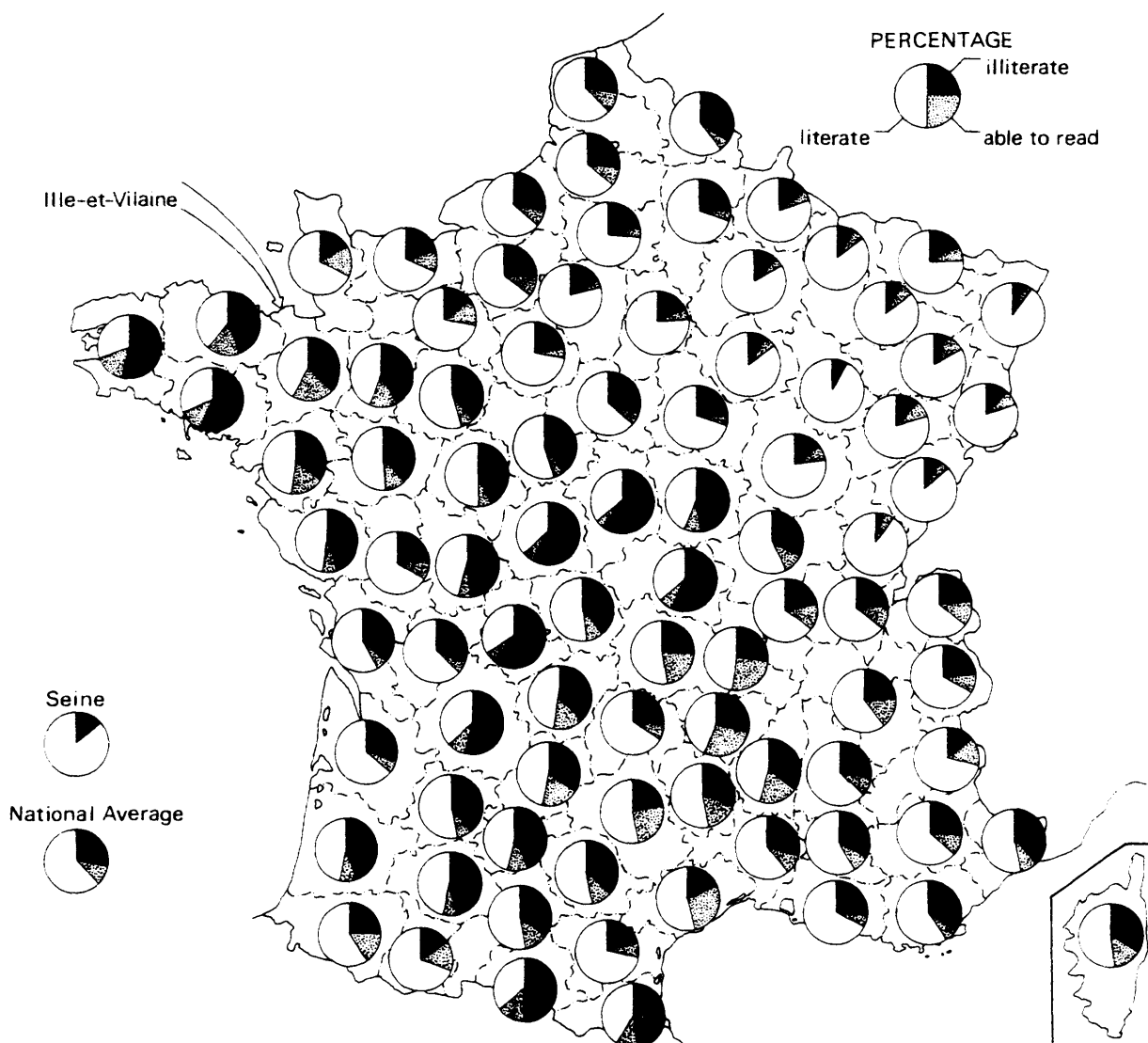
Table 1 Illiteracy rates in France, 1686-1876

Dates	Males	Females
1686-90	71%	86%
1786-90	53%	73%
1816-20	46%	66%
1872-76	23%	33%

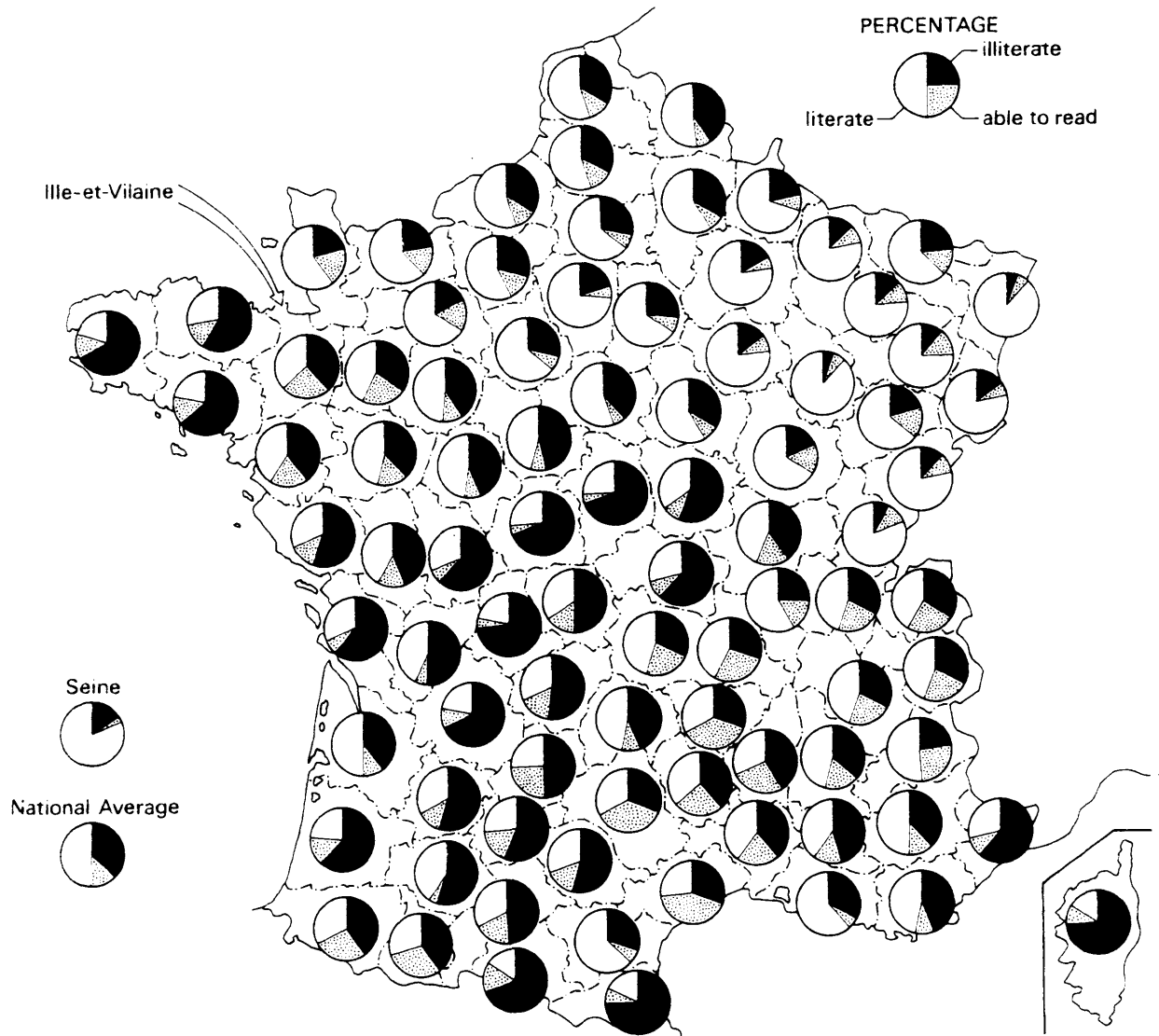
Notes: These figures certainly overestimate the actual level of illiteracy in France at each date. Due to the greater bureaucratic difficulties of gaining access to urban marriage registers, towns and cities, which tended to be more literate, are under-represented. These figures do not include those départements which were not continuously under French administration throughout this period.

Source: Ministère de l'Instruction Publique: statistique rétrospective - état récapitulatif et comparatif indiquant par département, le nombre des conjoints qui ont signé l'acte de leur mariage aux XVIIe., XVIIIe. et XIXe. siècles. Documents fournis par 15923 instituteurs, recueillis et classés par M. Maggiolo, recteur honoraire, chargé d'une mission spéciale par M. le Ministre de l'Instruction Publique, Paris, 1879.

Figure 1 Male illiteracy in France, 1866



Source: Statistique de la France: 2ème série - Tome XVII; Population - résultats généraux du dénombrement de 1866, Strasbourg, 1869



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demographic science has bequeathed a range of historical sources which can be used to trace the development of literacy and uncover the nature and range of geographical mobility in nineteenth century France. At least two major historical registers allow both the literacy and the geographical mobility of individuals to be analysed simultaneously. These are firstly, the military conscription registers and secondly, the civil marriage registers of the *état civil*.

Military conscription registers date back to 1793 and follow conscription laws which required all able-bodied twenty-year-old Frenchmen to serve in the revolutionary armies. For Ille-et-Vilaine, systematic records on conscripts begin in year VII of the republic (1798-9).⁵ As with the rest of the country, these records become more organised and detailed after the law of March 18, 1818 which re-organised the annual *tirage au sort*. Under this system, each commune established a *conseil de revision* to examine all would-be conscripts and record their physical and mental suitability for service. For each conscript, information was recorded on occupation, birthplace, current residence, height, colouring, parental residence and reasons for exemption. Following an ordinance of

February 1, 1827, literacy rates were also recorded. Conscripts were classified as either illiterate (unable to read or write), partially-literate (able to read only) or literate (able to read and write). Although no precise instructions were given on how to measure literacy, the *Ministère de l'Instruction Publique*, aware of the importance of these figures, carried out an independent verification on 3,750 conscripts from nine *départements* in the class of 1862 (those called up in 1863) which suggested that 'except for a few barely noticeable differences, the declarations gathered at the time of registration for the young men of each contingent, are recognised as correct'.⁶ Unfortunately, although literacy was being measured in each commune, the early nineteenth century figures are only available at an aggregate level. For Ille-et-Vilaine, the highly detailed local registers giving named individuals do not contain literacy rates until the mid-1840s.

The principal drawback of the conscription registers is the lack of information on the female population. This can be offset by reference to the *actes de mariage* of the *état civil* which include data on the female population. After the 1789 Revolution, the state began to maintain records of births, deaths and marriages in each newly-created commune. The handwritten *actes de mariage* are a particularly rich source of demographic information and provide, at a maximum, the age, occupation, birthplace and residence of the bride, the groom, both sets of parents (if present) and the four male witnesses. Following the Royal Ordinance of 1667 all marrying couples and the four witnesses were obliged to sign the *acte de mariage* if capable of doing so. It is therefore possible to use the presence or absence of a signature as a surrogate index of literacy rates.⁷

The validity of the signature as a valid approximation of literacy rates is subject to debate. Certainly, signature-literacy rates reduce the continuous variable of literacy to a binary, true-or-false dichotomy in a fairly arbitrary manner. Unlike direct measurement, which is in itself problematic, the signature provides no sure indication that a person can write more than their name and gives no guide about other skills such as numeracy. It also fails to offer any incontrovertible evidence about the ability to read. However, in this historical context, a signature is probably an acceptable literacy index as nineteenth century educational practice tended to draw a clear distinction between the mastery of reading on the one hand, and writing on the other, with the latter proceeding from the former. As paper and writing implements were relatively scarce, a signature implies at least a rudimentary familiarity with the handwritten word and therefore suggests some knowledge of reading. Moreover, it is not the absolute significance of the signature which is under consideration but its aggregative and comparative merit. The signature on an *acte de mariage* represents a measureable 'universal, standard and direct index with sufficient spatial, temporal and socio-economic coverage to allow large and representative statistical samples to be drawn'.⁸

Although these two sets of data are quite distinct, it is possible to demonstrate their complementary nature by comparing the average literacy rates of the grooms in a given year with that of the conscripts eight years earlier. This rather crude comparison of different male cohorts assumes that the average age

of marriage for males from the mid-1840s was about twenty-eight. This comparison shows, however, that with the exception of five years in the late 1850s, the illiteracy rates for each cohort of grooms and conscripts were never separated by more than four percentage points.

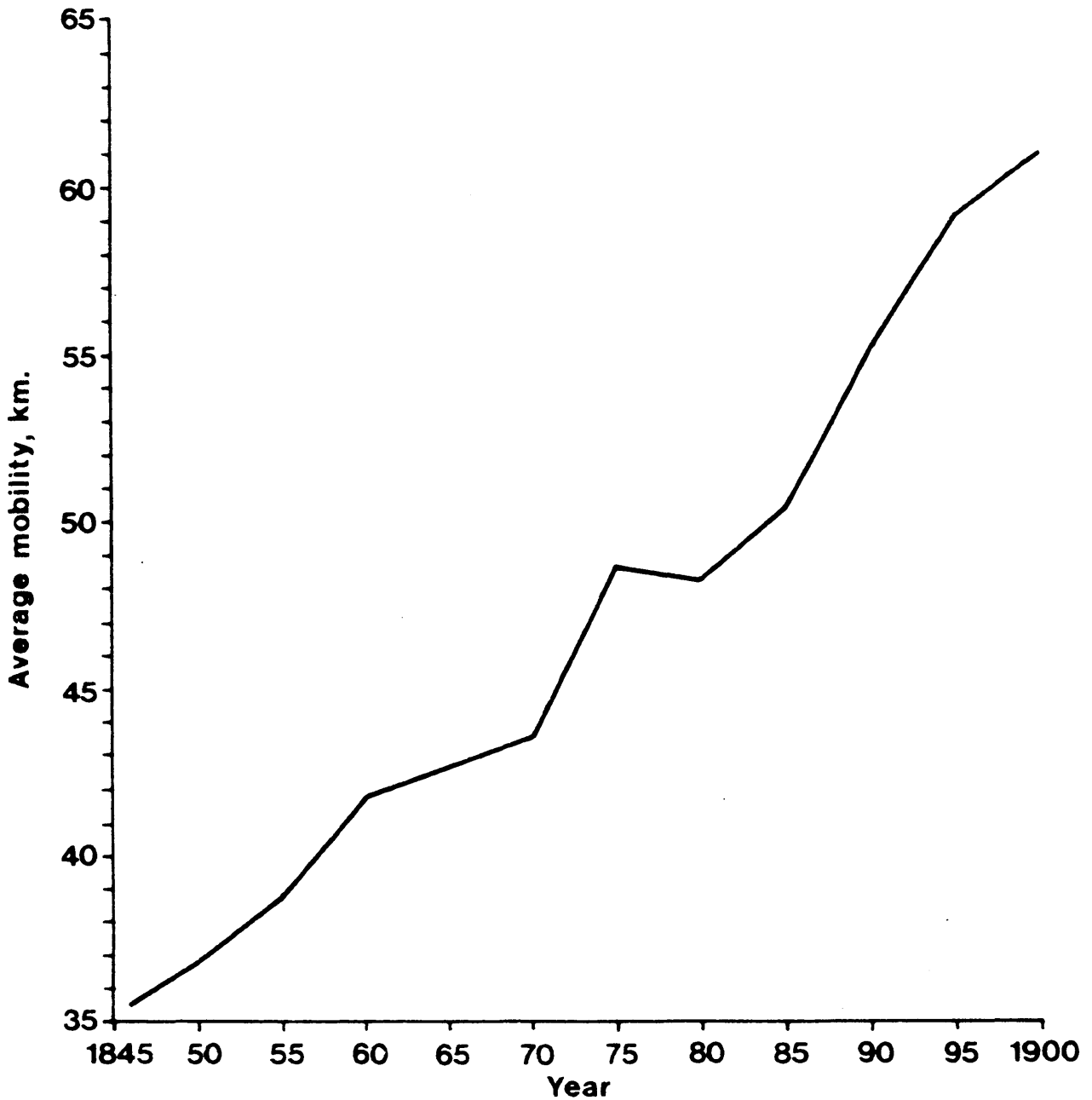
Methodology

Information from both these data-sources for nineteenth century Ille-et-Vilaine was analysed using a computer to discern if any relationship existed between literacy rates and a simple index of geographical mobility. The conscript registers for every fifth year between 1846 and 1900 were used to generate a set of twelve computer files representing a total of nearly 60,000 conscripts. The brides and grooms of 13,000 marriages from twenty-three sample communes covering the period 1800 to 1880 represented a second set of eighty-one computer files, one for each year.⁹ The two sets of files were analysed separately, firstly because each set contains information pertaining to distinct sub-populations recorded over different periods and secondly because the literacy scores of each set is recorded in different ways. In the case of the conscripts, literacy was coded as either 0 (illiterate), 1 (partially-literate) or 2 (literate). In the case of the brides and grooms, the literacy score was either 0 (non-signers) or 1 (signers).

Alongside the literacy rates, information was recorded for each conscript, groom and bride of the commune of birth and the commune of current residence. For all 363 communes existing in nineteenth century Ille-et-Vilaine, a hypothetical grid reference was derived from a detailed commune map of the *département*. A FORTRAN programme, based upon Pythagoras' theorem, calculated for each individual, a straight 'as-the-crow-flies' distance between the commune of birth and the commune of residence which was then multiplied by a constant factor derived from the scale of the original map used to construct the grid to produce the real distance in kilometres between the commune of birth and the commune of residence. If individuals were born and lived in the same commune, the mobility index would obviously be zero. If individuals were neither born nor currently resided in Ille-et-Vilaine, they were excluded from the analysis. Where **either** the birthplace or the current residence lay outside the boundaries of Ille-et-Vilaine, a simple shortcut was used. Each *département* in France was allocated to one of seven unequal groups corresponding to its distance from the boundaries of Ille-et-Vilaine so that if, for example, an individual was born in another *département* but lived in Ille-et-Vilaine, the birthplace would be represented by a grid-reference corresponding to the category in which the *département* found itself. These 'external' grid references were accommodated within the FORTRAN programme in order to compute an average distance in kilometres from that category of *départements* to the boundary of Ille-et-Vilaine. All locations outside France itself were included in the seventh and final category of *départements*, representing those areas furthest from Ille-et-Vilaine. This simple exercise obviously sacrifices considerable detail and must therefore be regarded as providing only a crude index of the changing levels of geographical mobility. At the end of the analysis, individuals from both data-sets were represented, for each year of the

analysis, by a single literacy score and a single crude index of geographical mobility.

Figure 3 Conscript mobility, 1846-1900



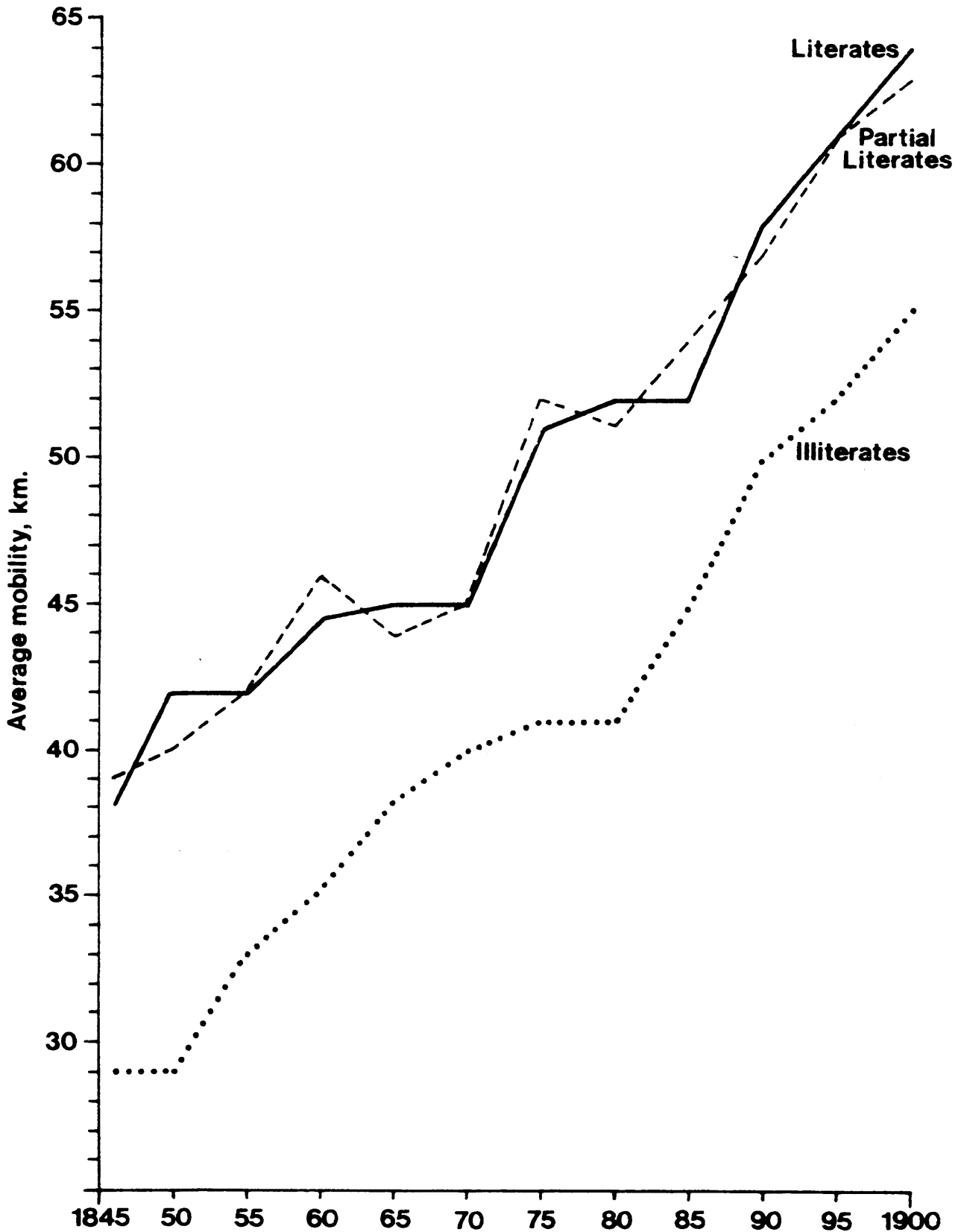
Source: Etat Militaire - listes du tirage au sort. AD Série R

Results

For both sets of data, average literacy percentages and average geographical mobility indices were calculated for each year analysed. The conscript data demonstrates that, even when measured in this crude way, the average geographical mobility of twenty-year old Frenchmen was increasing steadily during the second half of the nineteenth century (figure 3). Moreover, when the evidence is examined according to the three categories of literacy (illiterates,

partial literates and literates) it seems that for much of the period under scrutiny, literates and partial literates were noticeably more mobile than illiterates (figure 4). There does not appear to have been any appreciable difference between the mobility characteristics of full and partial literates.

Figure 4 Conscript mobility by literacy category, 1846-1900



Source: Etat Militaire - listes du tirage au sort. AD Série R

Figure 5 Mobility of male and female partners, 1800-1880

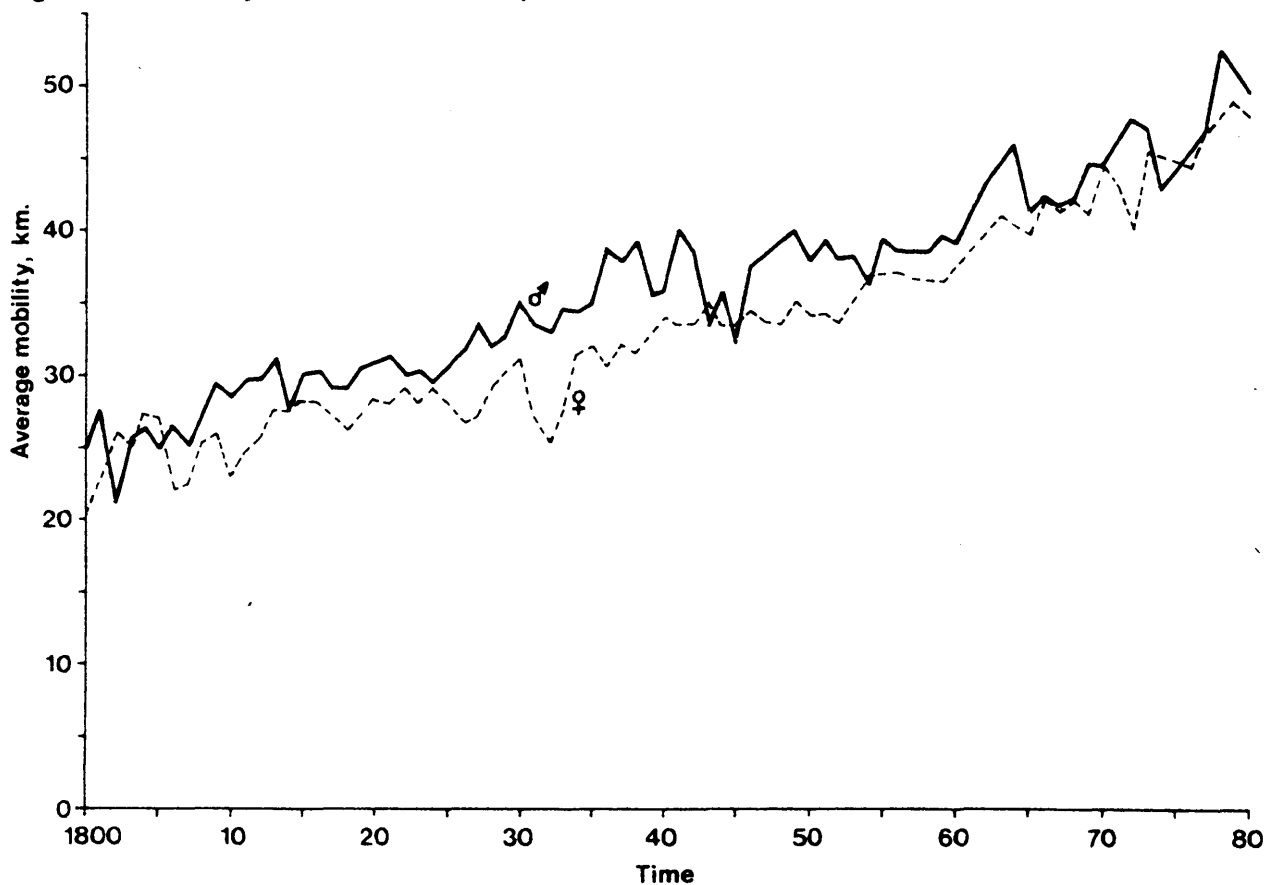
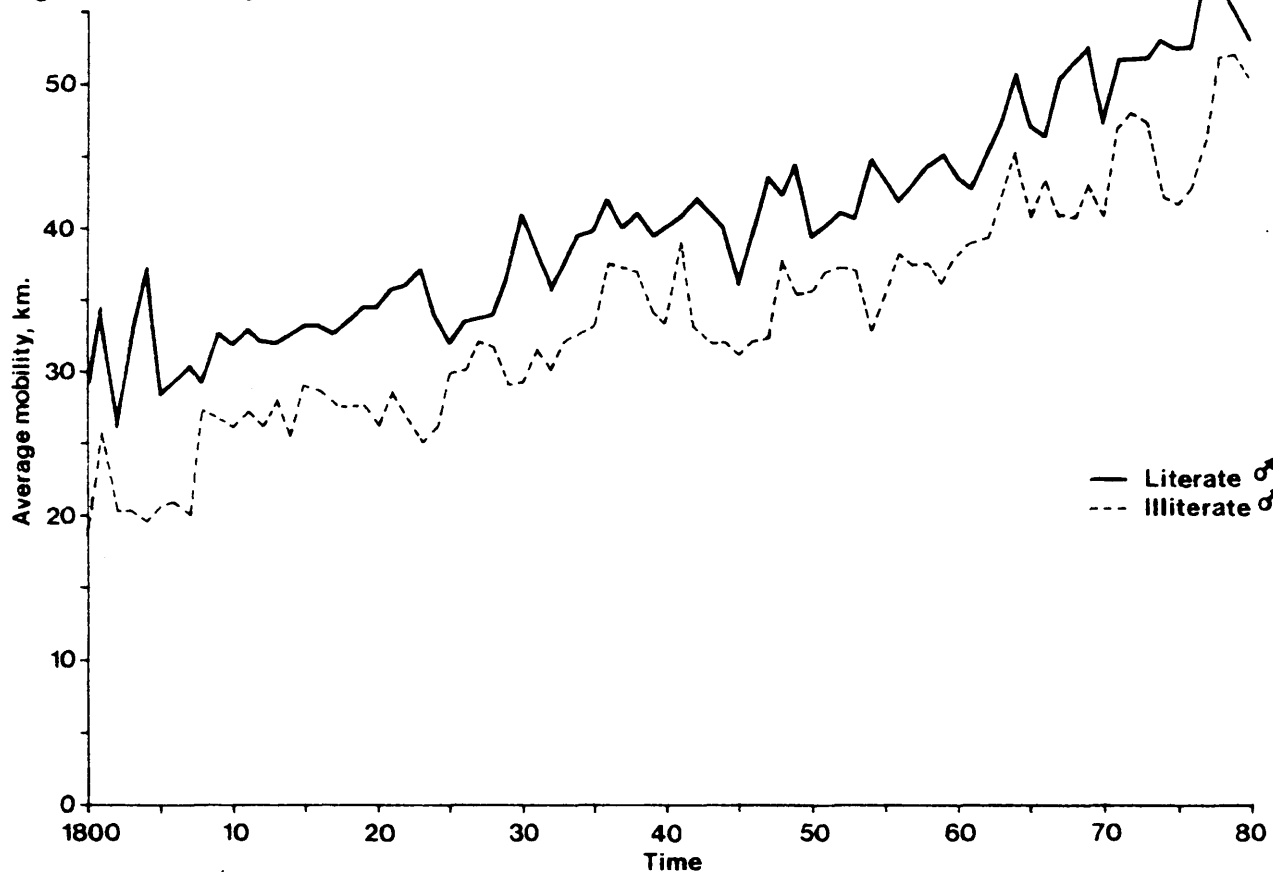
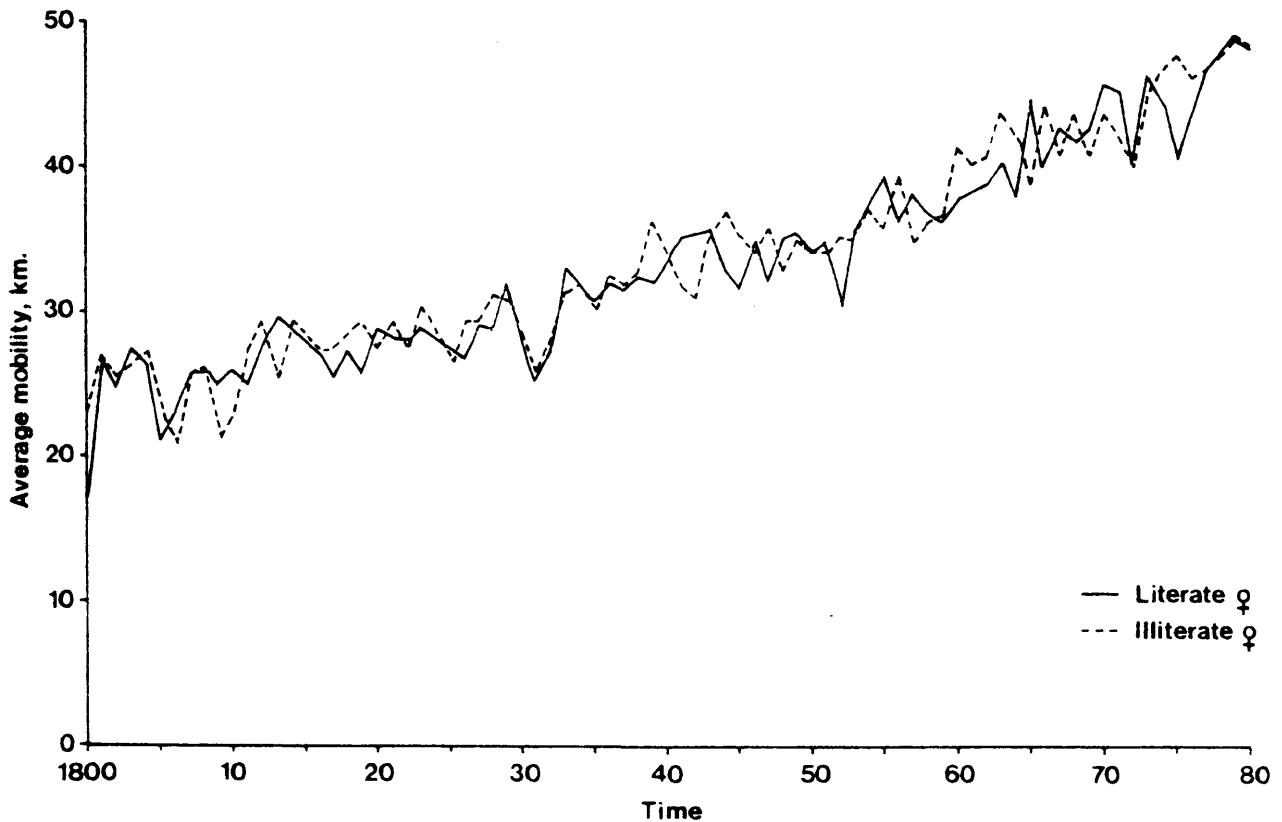


Figure 6 Mobility of literate and illiterate males, 1800-1880



Source: For Figures 5 & 6, Etat Civil - actes de mariage. AD Série M

Figure 7 Mobility of literate and illiterate females, 1800-1880



Source: Etat Civil - actes de mariage. AD Série M

The average mobility scores from the *actes de mariage* also suggest a population that was becoming increasingly mobile. It seems that males tended to be more mobile than females, although there were a few years when this was not the case (figure 5). The relationship between male signature-literacy rates and geographical mobility lends credence to the conscript data (figure 6). Within the increasingly mobile male population of Ille-et-Vilaine, literates were continually more migratory than their illiterate contemporaries. Amongst the female population, there does not appear to have been any clear relationship between literacy and mobility (figure 7).

Conclusion

The measures used in this analysis are obviously crude and the claims that can be made must be limited by that fact. Literacy rates and geographical mobility were both changing over time in response to a range of external forces which were themselves varying in their importance. It is also debatable whether literacy was the independent variable in its relationship with geographical mobility. Although male mobility may well have been facilitated by the acquisition of literate skills, it is also possible that mobility may have actively increased literacy. Nevertheless, the clarity and consistency of the relationship between male literacy and male geographical mobility does suggest that these two variables were positively related in this region of France.

These results suggest three conclusions about the nature of literacy and mobility in nineteenth century France. Firstly, the superior literacy rates of the migrant male population might partially explain the differential levels of literacy in town and country. Throughout most of the eighteenth and nineteenth centuries, French towns and cities were more literate than their rural hinterlands even though the incoming population often overstretched the formal and informal urban education provision. The evidence presented here suggests that this general cultural division between town and countryside may have been sustained by literacy-specific rural-urban migration. This implies not only that literate males were likely to be more aware of the possibilities for economic and social advancement beyond their immediate locality but also that the demand for male labour may have been determined by educational attainments. It must be stressed, however, that this relationship was not universal. In the case of rapid, large-scale in-migration to industrial cities, literacy seems to have been unimportant in promoting migration. Indeed, the immigration to the developing cities in the north-eastern industrial belt of France and in industrialising Lancashire seems to have increased the level of urban literacy above that of the surrounding countryside.¹⁰ The relationship between literacy and mobility was therefore partly determined by the dynamic of economic development and by the nature of the labour process in the regions and towns which received migrant populations.

Secondly, this exercise suggests that, in terms of their mobility, the crucial division was between those males able to read and those males unable to read. As there was no discernible distinction between the mobility of male partial literates, the skill of writing appears to have been of secondary importance as a factor influencing mobility rates.

Thirdly, the lack of any relationship between female literacy and female mobility suggests that the nature and motives for women's migration were different from their male contemporaries. Female labour opportunities were certainly more restricted in range and were therefore less dependent on cultural and educational attainment.¹¹

NOTES

1. F. Furet and J. Ozouf, *Lire et écrire: l'alphabétisation des Français de Calvin à Jules Ferry*, Paris, 1977, contains an extensive bibliography. Volume one is translated as *Reading and writing: literacy in France from Calvin to Jules Ferry*, Cambridge, 1982. More recent work includes G. Désert, 'Alphabétisation et scolarisation dans le grand ouest au XIXe. siècle', in D.N. Baker and P.J. Harrigan (eds), *The making of Frenchmen: current directions in the history of education in France, 1679-1979*, Waterloo, Ontario, 1980, pp.142-205; and J. Markoff, 'Some effects of literacy in eighteenth century France', *Journal of Interdisciplinary History*, 17, 1986, pp.311-33. On the geography of literacy in France, see B. Lepetit, 'Sur les dénivellations de l'espace économique en France, dans les années 1830', *Annales. Économies. Sociétés. Civilisations.*, 41, 1986, pp.1243-72; and D.J. Siddle, 'Cultural prejudice and the geography of ignorance: peasant literacy in south-eastern France, 1550-1790', *Transactions of the Institute of British Geographers*, 12, 1987, pp.19-28.
2. A. Châtelain, *Les migrations temporaires en France de 1800 à 1814: histoire économique et sociale des migrants temporaires des campagnes françaises au XIXe. siècle et au début du XXe. siècle*, Paris, 1977; P. Merlin, *Exode rurale*, Paris, 1971; L.P. Moch, *Paths to the city: regional migration in nineteenth century France*, London, 1983; P.E. Ogden, 'Migration, marriage and the breakdown of traditional peasant society in rural France', in R.I. Woods and

- P.E. White (eds), **Geographical impacts of migration**, London, 1980, pp.152-71; A. Pointreau, **Remues d'hommes: essai sur les migrations montagnardes en France aux XVIIIe. et XVIIIe. siècle**, Paris, 1983; and W.H. Sewell, **Structure and mobility: the men and women of Marseille, 1820-1870**, Cambridge, 1985.
3. For an exception see Sewell, pp.196-7.
 4. On the use and depiction of European statistics in the early nineteenth century, see Arthur H. Robinson, **Early thematic mapping in the history of cartography**, London, 1982, pp.154-82.
 5. Archives Nationales F9 193.
 6. **Ministère de l'instruction publique de son excellence Monsieur Duruy: circulaires et instructions officielles relatives à l'instruction publique, 1863-1870**, 1870, pp.321-2.
 7. Both the conscription registers and the marriage registers are available in departmental archives, the first in **Série R**, organised by arrondissement and year, and the second in **Série M - État Civil**, organised by commune and year. Aggregate details of conscript data are available in **Ministère de la Guerre: comptes présentés en exécution de la loi du 18 mars, 1818 sur le recrutement de l'armée pendant l'année 1818-1901**, Paris, 1819-1902. On the use of conscription registers, see J.-P. Aron, P. Dumont and E. Le Roy Ladurie, **Anthropologie du conscrit français (d'après des comptes numériques et sommaires du recrutement de l'armée, 1819-1826)**, Paris, 1972; and E. Le Roy Ladurie and N. Bernagan, 'The conscripts of 1868: a study of the correlation between geographical mobility, delinquency and physical stature, and other aspects of the situation of the young Frenchmen called to do military service in that year', in E. Le Roy Ladurie (ed), **The territory of the historian**, Brighton, 1979, pp 33-60; and E. Le Roy Ladurie and M. Demenot, 'Alphabétisation et stature: un tableau comparé', **Annales. Économies. Sociétés. Civilisations.**, 35, 1980, pp.1329-32. Marriage registers are discussed in Sewell, 1985, pp.7-10. Published signature-literacy rates were produced annually in various forms after 1854 in the **Statistique de la France**.
 8. R.S. Schofield, 'The measurement of literacy in pre-industrial England', in J. Goody (ed), **Literacy in traditional societies**, Cambridge, 1968, pp.318-9. Further discussion is provided in R. Chartier, M.-M. Compère and D. Julia, **L'éducation en France du XVIe. siècle au XVIIIe. siècle**, 1976, pp.87-109; Furet and Ozouf, **Reading and writing**, Cambridge, pp.11-18. Attempts have been made to develop a taxonomy of signature styles to increase the resolution of the index. See J. Queniat, **Culture et société urbaine dans la France de l'ouest au XVIIIe. siècle**, Paris, 1978.
 9. The twenty-three communes selected for detailed study were St Coulomb, Miniac Morvan, Bazouges-la-Perouse, Louvigné-du-Desert, St Étienne-en-Coglès, Fougères, Dingé, Hédé, St Aubin d'Aubigné, Liffré, Quedillac, St Gilles, Rennes, Balazé, Argentré-du-Plessis, Domloup, Bruz, Amanlis, Paimpont, Guignen, Pipriac, Martigné-Ferchaud and Redon.
 10. This issue is explored in R.S. Schofield, 'The dimensions of illiteracy, 1750-1850', **Explorations in Economic History** 10, 1973, pp.452-4. On north-east France, see F. Furet and J. Ozouf, 'Literacy and industrialisation: the case of the *département du Nord* in France', **Journal of European Economic History**, 5, 1976, pp.5-44; and on industrial Lancashire, see M. Sanderson, 'Literacy and social mobility in the Industrial Revolution in England', **Past and Present**, 56, 1972, pp.75-104.
 11. A. Châtelain, 'Migrations et domesticité féminine urbaine en France, XVIIIe. siècle-XXe. siècle', **Revue d'histoire économique et sociale**, 47, 1969, pp.506-20.