DID THE CATHOLICS ALWAYS HAVE LARGER FAMILIES?:

RELIGION, WEALTH AND FERTILITY IN RURAL ULSTER BEFORE 1911

Cormac Ó Gráda

Did the Catholics always have larger families?:
Religion, Wealth and Fertility in Rural Ulster Before 1911

ABSTRACT

Analysis of marital fertility in rural Derry c. 1911 confirms the
presence even then of a gap between Catholics and Protestants.
The difference was small, however, compared to today's, and for
couples who had married before the mid-1880s it was
insignificant. Various indicators of 'wealth' suggest that, all
else equal, wealthier couples have more children, thereby
suggesting that children are a 'normal good' in the economic
sense. At given values of the 'wealth variables', labourers tend
to have more children than farmers. Controlling for these
economic factors tends to widen the fertility gap between
Catholics and Protestants.

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SUMMARY

An analysis of the marital fertility of farmers' and farm
labourers' wives in rural Derry c. 1911 based on manuscript
census material suggests that the well-known gap between Catholic
and Protestant family size was present even then. However, the
difference was quite small - about 0.3 children per completed
family - and insignificant in the case of women who had married
before the mid-1880s. Various indicators of 'wealth' suggest
that, all else equal, wealthier couples have more children,
although there is also a tendency for labourers to have more
children than farmers. Had Catholics in rural Derry been as
well-off as their Protestant counterparts, they would have had
more children. This finding contrasts with the popular belief
today that the larger families reared by northern Catholics
reflect a culture of poverty.

At the recent CEPR workshop on human resources (London, 27-8 January 1984), J M Winter's contribution raised yet again one of the standard issues of population economics, the influence of economic factors on fertility. Winter's scepticism about the power of economics to explain changes or differences in the trends in fertility over time was met by claims from other speakers that cultural, political, and economic factors are all part of the picture. In this paper the same issue is broached in a novel context, that of Northern Ireland around the turn of the century. The marital fertility gap between Protestant majority and Catholic minority in Northern Ireland has been widely noted and analyzed. The gap has been narrowing, though very slowly; in 1971 Catholic fertility was two-thirds higher than Protestant. Normally, analysis of such a difference might be left to professional journals, but in Northern Ireland it is sometimes seen as an element in the present civil strife. The gap has helped the Catholic share of the population to rise from 33.5 per cent in 1926 to about 38 per cent today, despite heavier emigration, provoking majority fears of "revenge from the cradle". Such fears have not generated any explicit policy response, though in one instance in 1956 a clumsy attempt was made to curb Catholic fertility by excluding Northern Ireland from the provisions of a revised British family allowance scheme (Barritt and Carter, 1962: 109-10). [1]

The several explanations suggested for this gap may be grouped into the economic, the cultural, and the political.

The first links the higher fertility of Catholics with their poverty and rurality - these rather than religion per se account for the gap. It must be said that the explanation lacks conviction today, since Catholics of all socio-economic backgrounds register higher fertility levels than their Protestant counterparts (Compton, 1982a). The political explanation is difficult to test, though it is not confirmed in its "minority status" guise (Day ; Compton, 1982(c)). Catholics in the Irish Republic face no "oppressive" majority, yet their marital fertility today is even higher than that of Northern Catholics, while southern Protestants have recorded considerably lower fertility than Catholics, despite their declining numbers (Kennedy, 1973a ; Walsh). Economists sometimes look upon cultural explanations with the disfavour that some Marxists reserve for references to "superstructure" ; if behavioural patterns cannot be explained in terms of prices and incomes, then the underlying model is being mispecified somewhere (Becker and Stigler). The cultural explanation is the most plausible on modern Irish evidence, however, and finds striking support elsewhere too (e.g. Lesthaege).

Fertility trends in Ireland during the nineteenth century and earlier are almost a blank. Mokyr (1983, ch. 2) and Tucker (1970) have inferred high fertility on the eve

[1] As in all polarized communities, placenames and group descriptions are sensitive issues in Northern Ireland. Following the rule-of-thumb that the usage preferred by those being described should be followed, the minority are called `Catholic' here, but Londonderry and Derry are used interchangeably.

of the Great Famine from the census of 1841, but analysis of
subsequent trends has been dogged by bad registration data,
censal under-reporting, and ignorance of infant mortality
levels. The parish reconstitution studies which could
provide the answers have yet to be carried out. For the
twentieth century, the situation is better. Both censal and
civil registration data show that marital fertility in
Northern Ireland has been dropping since the turn of the
century. The most important aim of this study is to see
whether the Catholic fertility advantage, though perceived
as a "problem" since the 1920s, goes back further than then.
We shall also seek evidence for the economic explanation.

The main source used is the 1901 and 1911 Irish
manuscript census returns. The fertility information
included in the 1911 returns - each married woman was asked
to detail how long she had been married, how many children
she had borne, and how many were still alive - make them an
irresistable source. However, as has been emphasized by
Fitzpatrick in particular, that census contains one major
trap for the unwary : the provisions of the Old Age
Pensions Act of 1908 encouraged adults to exaggerate their
ages, in the belief that telling the truth on their census
forms might be used as evidence against them (Fitzpatrick
1977). In the absence of civil registration before 1864,
applicants were often dependent on parish registers or
personal references when applying ; in many cases a word
from the local priest that the applicant remembered the
"night of the big wind" (in 1839) was considered proof

enough (Sayers ; Laighleis). As a result there was an increase of over one-half in the numbers reportedly aged 65 years or more between 1901 and 1911. The census commissioners' explanation is worthy of the best in Candide :

> The figures would tend to show that in
> previous censuses the old people were not
> aware of their age, and must have had in a
> large number of cases underestimated it.
> The Old Age Pensions Act led a considerable
> number of them to ascertain their correct
> age.

Use of the 1911 census to infer age at marriage or age-specific fertility must clearly lead to upward biases. On the other hand, the census commissioners were apparently right in the sense that in 1911 people of all ages were far less prone to return approximate or rounded ages, ending in 0 or 5, than in 1901 (Thompson). In other words, the 1911 data are less subject to age-heaping : the Whipple index — a common measure of this phenomenon (Shryock and Siegel, vol. I, 205-7) — calculated for women included in this study dropped from 215 in 1901 to 155 in 1911. Figure I, which is based on the ages given by 1202 women in the censuses of 1901 and 1911, also reflects the change. The "spikes" in 1901 are much longer, but the effects of age-exaggeration in 1911 are also evident.

The problem of age-misreporting in 1911 dictated the

following strategy. Twenty-two district electoral divisions in Counties Londonderry and Tyrone were selected.[2] In order to control for occupation, the areas chosen were largely rural, and only farming and farm labourer families in them were considered.

The electoral districts selected were all confessionally mixed : six of them were located in the hinterland of Derry City, eight in the Clogher Valley, and six more around Magherafelt. These areas are shaded on the adjoining map. The age and fertility history of over 2250 women were coded, and husbands' age, religion, whether farmer or labourer, and literacy of husband, were also noted. Next, where possible, the data were linked with the 1901-manuscript returns, and additional information on housing quality and the number of farm buildings coded. Finally, again where possible, census and valuation data were linked. These additional variables are used as proxies for wealth below.

A breakdown of the original 1911 data produced 1500 farming familes and 700 labouring ones. Cross-tabulations (see Table 1) showed the Catholics to be at the bottom of the economic ladder by all available criteria (valuation, outbuildings, literacy, or housing quality). Interestingly enough, by the same measures, Church of Ireland families were much closer to Catholic than to Presbyterian in

[2] Maghera, Springhill, Castledawson, Magherafelt, Eglinton, Claudy, Glendermot, Lough Enagh, Moneymore, Desertmartin, Salterstown, Faughanvale, Favor Royal, Tullyvar, Tamnaherin, Fivemiletown, Ballagh, Cecil, Cole, Brackagh Slieve Gallion, Ballygawley, Clogher.

socio-economic status (see table 1a). Controlling family size for duration of marriage (Table 1b), both Catholic and Church of Ireland households contained more children than Presbyterian. Further crosstabulations indicated that Presbyterian had married over a year later than the others, however. Note also that the difference in family size was insignificant for couples already married over twenty-five years in 1911. Farmers in the survey areas married three years later than labourers, and had smaller families.

It was hoped at first that the 1901 data could be used to "correct" the errors in 1911. If, for instance, women allegedly aged between 35 and 40 years in 1911 were shown to have "aged" on average by twelve years between 1901 and 1911, then their correct age might be set at [age in 1911 less 2]. The correction would allow the use of the less age-heaped 1911 returns. But this, it turned out, would have been wrong, since closer analysis showed lying to be quite closely related to socio-economic status. The poor, presumably because the perceived incentive for them was greater, tended to exaggerate their ages more.

A brief analysis of lying in 1911 may be relevant at this point. While we suspect that its extent was greater elsewhere, the patterns found in rural Derry and Tyrone were probably general. Comparing 1901 and 1911, the first finding is that age-exaggeration was present not just on the verge of seventy years, but over the whole range of adulthood. Summary results are presented in Table 2. It

will be noted that women tended to add more than men : to some extent this may have been due to an earlier reluctance to reveal their full age (compare Wrigley and Schofield, pp. 108-9). Closer analysis (see Table 3) shows that Catholics lied more than Protestants, and that lying was negatively correlated with housing quality, number of farm outbuildings, literacy, and valuation. A key to the variables used in the analysis is given below. Labourers lied more than farmers. As already stated, the Catholics were on average poorer : whether controlling for this, they still lied more, is a nice point. Our wealth variables are admittedly rather crude, yet they do reduce the coefficient on SECTAR in the regressions reported in Table 4. In 4.4, which includes all wealth variables, SECTAR's coefficient falls to 0.97 or half its original size in 4.1.

Because both LIARM and SECTAR are correlated with all our wealth variables, correcting AGEM1911 for lying in order to explain fertility is pointless. However, the correction for lying is not a complete waste, since the new data can be used to provide some indication of the trend in fertility over time. This is so only if people in 1911 did not systematically lie about DURMAR as well. A breakdown of the data gives the following result : while marriages of 25-40 years duration had resulted in 6.3 children on average, marriages occurring before 1871 had produced 7.4 children.

Variables used in the Regressions

    AGEM1901,AGEM1911 : mother's age in 1901 and 1911

    AGEF1901,AGEF1911 : father's age in 1901 and 1911

    LIARM : AGEM1911-AGEM1901-10

    LIARF : AGEF1911-AGEF1901-10

    DURMAR : duration of marriage, 1911

    BORNLIVE : children born alive

    SERVANT : servants living in

    LITERACY :dummy variable - 0 if father

       literate, 1 if illiterate

    OUTHSE : number of farm outhouses, 1901

    HSEPTS : number of housepoints, as defined in 1901

       census

    VTION : house and land valuation, 1911 (S)

    SECTAR : dummy variable - 0 for Protestant, 1 for

       Catholic

    REALAGEM, REALAGEF : 1901 age plus 10

    FERT : equals DURMAR if REALAGEM less than 49.

       Otherwise [49 - (REALAGEM - DURMAR)]

    D1 : dummy variable, 1 for farmer, 0 for labourer

    FERTSQ, FERTCU : FERT**2, FERT***3

Our next task is to look at fertility and religion. The dependent variable throughout is BORNLIVE : experimentation with log transformations produced results not materially different. The independent variables are FERT and transformations thereof, SECTAR, and the different

wealth variables. Table 5 reports our results.

All regressions indicate, as expected, a very high level of marital fertility. Those including FERTSQ and FERTCU work best, the sign on the fertility coefficients showing an eventual decline in fertility with age. Throughout the coefficient on the SECTAR dummy is positive, ranging between 0.3 and 0.4, and for the most part it is statistically significant at conventional levels (remember that a one-tailed test is appropriate here). The result implies that Catholic households' completed family size was larger on average by about one-third of a child early in the present century. This finding is the most important result of the present exercise. The other variables fail to make much of an impact on SECTAR coefficient, though some of them affect it in plausible ways. Labourers had higher fertility than farmers : controlling for this reduces the coefficient somewhat, since the labouring population was disproportionately Catholic. The size and significance of the coefficient on SERVANT suggests that families with few children hired more labourers. Overall, the wealth and other variables, taken together, added to the size and significance of the SECTAR coefficient. While this seems plausible in the context, it is the opposite to what is sometimes claimed today about northern Catholics. Popular belief has it that their higher fertility reflects a culture of poverty. Yet it must also be noted that none of the wealth variables increased the explanatory power of the regressions by much.

In sum, the big fertility gap so widely noted today was absent in the areas surveyed. In these rural areas at least, all confessional groupings registered high marital fertility. The confessional gap hardly existed at all for those couples who had married before the mid-1880s. Yet our analysis clearly indicates the beginnings of such a contrast.

Table 1a: Health by Religion

	Catholic	Presbyterian	Church of Ireland
Servant	0.132	0.361	0.175
Vtion	10.3	21.8	14.2
Hsepts	6.35	7.83	7.05
Outhse	4.79	6.83	5.75
Literacy	0.329	0.096	0.232

Table 1b: Children by Religion (number of observations in brackets)

Duration of Marriage	Catholic	Presbyterian	Church of Ireland
0-10	2.19(275)	1.97(262)	2.15 (156)
11-25	5.18(297)	4.48(295)	4.67 (184)
26-40	6.35(204)	6.07(220)	6.58 (132)
Over 40	7.26(91)	7.20(83)	7.91 (53)

Note : the variables are further explained in the text.

Table 2. Lying by Age in 1911

(In years, number of observations in brackets)

Age	Women	Men
35 or less	0.94 (48)	1.59 (83)
36-40	1.94 (127)	1.97 (118)
41-45	2.51 (134)	1.80 (115)
46-50	3.34 (237)	2.31 (200)
51-55	2.37 (147)	1.91 (164)
56-60	3.24 (202)	2.95 (239)
61-65	3.03 (117)	2.65 (140)
66-70	1.51 (96)	1.87 (155)
71-75	0.00 (48)	0.64 (84)
76 +	-1.67 (42)	-0.36 (77)

Table 3. <u>LIARM, LIARF, Religion, and Wealth</u>

	LIARM	LIARM
Catholics	3.55	2.94
Protestants	1.69	1.43
HSEPTS		
1-5	3.46	2.30
6-10	2.14	1.96
Over 10	1.07	1.41
VTION		
£1-£10	2.94	2.47
£11-£30	2.17	1.69
£31-£100	0.64	1.45
LITERACY		
0	2.07	1.76
1	3.51	2.96
SERVANT		
None	2.55	2.13
One	1.76	1.34
>1	0.37	1.19

Table 4. LLAPK and LLAPF : Regression Results

Dependent Variable	Constant	SECTOR	LITERACY	YTLOR	HSRATIO	DI	OUTRISK	F (d.f.)
4.1 LLAPK	1.661	1.847 (0.321)	-	-	-	-	-	33.1 (1,1196)
4.2 LLAPK	1.860	1.531 (0.333)	0.842 (0.392)	-0.022 (0.009)	-	-	-	15.2 (3,1194)
4.3 LLAPK	2.438	1.673 (0.320)	-	-	-0.156 (0.031)	-	-	29.6 (2,1195)
4.4 LLAPK	2.067	0.989 (0.333)	0.735 (0.398)	-0.015 (0.010)	-0.095 (0.82)	1.160 (0.548)	-0.068 (0.058)	7.1 (6,977)
4.5 LLAPF	1.414	1.496 (0.269)	-	-	-	-	-	31.0 (1,1373)
4.6 LLAPF	1.387	1.316 (0.279)	0.759 (0.339)	-0.008 (0.008)	-	-	-	12.6 (3,1371)
4.7 LLAPF	1.636	1.471 (0.270)	-	-	-0.022 (0.026)	-	-	15.9 (2,1372)
4.8 LLAPF	1.926	1.085 (0.303)	0.589 (0.385)	-0.009 (0.009)	-0.036 (0.075)	0.325 (0.501)	0.016 (0.054)	4.4 (6,977)

Table 5. Pollution and Fertility : Regression Results

	Dependent Variable	Constant	FERT	NECTAR	D1	NEGPTS	OUTESS	YTION	LITERACY	SERVANT	R^2	F	(d.f.)
5.1	BORNALIVE	0.651	0.229 (0.011)	–	–	–	–	–	–	–	.254	409.9	(1,1196)
5.2	BORNALIVE	1.709	0.228 (0.011)	–	-1.011 (0.306)	–	–	–	–	–	.290	211.5	(2,1195)
5.3	BORNALIVE	0.748	0.228 (0.011)	0.331 (0.180)	–	–	–	–	–	–	.255	205.5	(2,1195)
5.4	BORNALIVE	0.762	0.229 (0.011)	0.372 (0.188)	–	–	–	–	-0.193 (0.221)	–	.255	137.9	(3,1194)
5.5	BORNALIVE	0.900	0.228 (0.011)	–	–	-0.008 (0.022)	–	–	–	–	.254	204.5	(2,1192)
5.6	BORNALIVE	1.864	0.228 (0.011)	0.363 (0.187)	-1.060 (0.316)	–	–	–	-0.404 (0.227)	-0.216 (0.155)	.263	95.5	(5,1192)
5.7	BORNALIVE	1.677	0.315 (0.011)	0.315 (0.179)	-0.990 (0.308)	–	–	–	–	–	.262	142.3	(3,1194)
5.8	BORNALIVE	1.648	0.229 (0.012)	0.372 (0.207)	-1.355 (0.406)	0.031 (0.029)	0.043 (0.037)	0.002 (0.009)	-0.194 (0.253)	-0.402 (0.186)	.257	45.6	(8,1023)
5.9	BORNALIVE	1.550	0.229 (0.012)	0.337 (0.202)	-1.303 (0.404)	0.031 (0.029)	0.045 (0.037)	0.002 (0.009)	–	–	.258	52.1	(7,1024)

Table 5. continued

	Dependent Variable	Constant	FBIT	FBITSQ	FBITCU	BESTAN	D1	LITERACY	HSEPTS	OUTNSE	SERVANT	VTION	R^2	F	(d.f.)
5.10	BURNLIVE	1.598	-0.00192 (0.092)	0.01554 (0.0051)	-0.000294 (0.00009)	–	–	–	–	–	–	–	.060	141.1	(3,1194)
5.11	BURNLIVE	1.639	0.00317 (0.092)	0.01552 (0.0051)	-0.000292 (0.00009)	–	–	-0.090 (0.214)	–	–	–	–	.260	105.9	(4,1190)
5.12	BURNLIVE	1.784	-0.0108 (0.092)	0.01579 (0.0051)	-0.000298 (0.00009)	–	–	-0.113 (0.216)	0.013 (0.022)	–	–	–	.260	84.7	(5,1189)
5.13	BURNLIVE	1.655	0.0150 (0.092)	0.0164 (0.0051)	-0.000287 (0.00009)	0.349 (0.187)	–	-0.213 (0.223)	-0.008 (0.022)	–	–	–	.261	71.3	(6,1188)
5.14	BURNLIVE	2.742	-0.022 (0.091)	0.0187 (0.005)	-0.000304 (0.00009)	0.371 (0.180)	-1.159 (0.318)	-0.408 (0.227)	–	–	–	–	.270	64.2	(7,1190)
5.15	BURNLIVE	1.554	-0.0106 (0.092)	0.01563 (0.0051)	-0.000287 (0.00009)	0.376 (0.186)	–	-0.187 (0.222)	–	–	-0.199 (0.155)	–	.260	85.7	(5,1192)
5.16	BURNLIVE	1.500	-0.0057 (0.092)	0.01565 (0.0051)	-0.000288 (0.00009)	0.338 (0.179)	–	–	–	–	–	–	.261	107.0	(4,1193)
5.17	BURNLIVE	2.508	-0.0161 (0.091)	0.0165 (0.005)	-0.000300 (0.00009)	0.318 (0.179)	-1.074 (0.307)	–	–	–	–	–	.258	98.8	(5,1192)
5.18	BURNLIVE	2.811	-0.0218 (0.107)	0.0219 (0.006)	-0.000405 (0.00010)	0.345 (0.181)	-1.450 (0.406)	-0.186 (0.263)	0.023 (0.039)	0.040 (0.037)	-0.398 (0.181)	0.002 (0.006)	.268	39.7	(10,1021)

County Derry :
the areas chosen
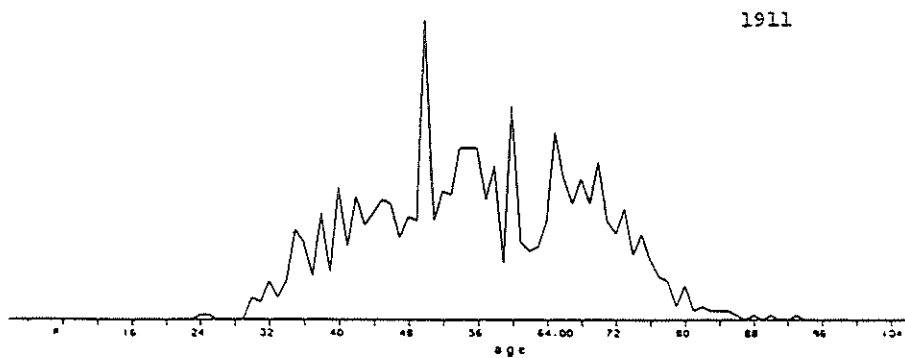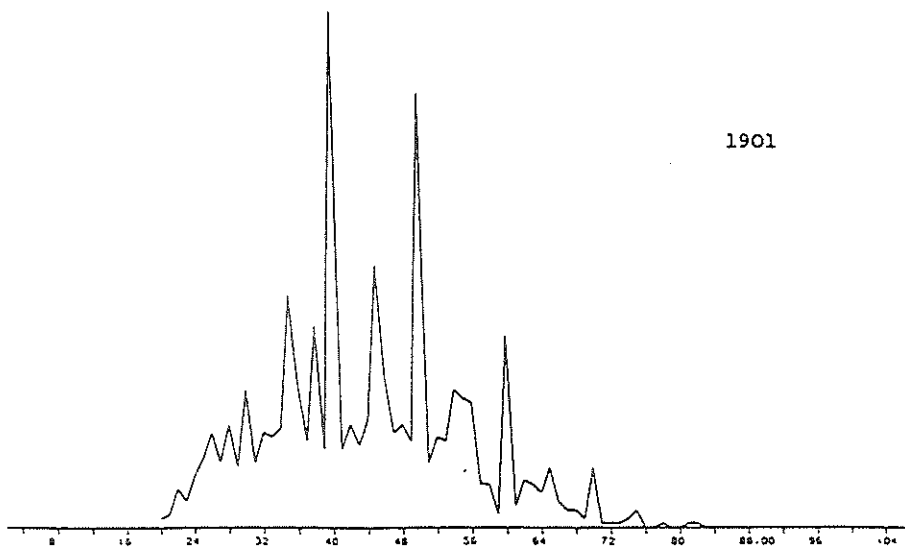for analysis are
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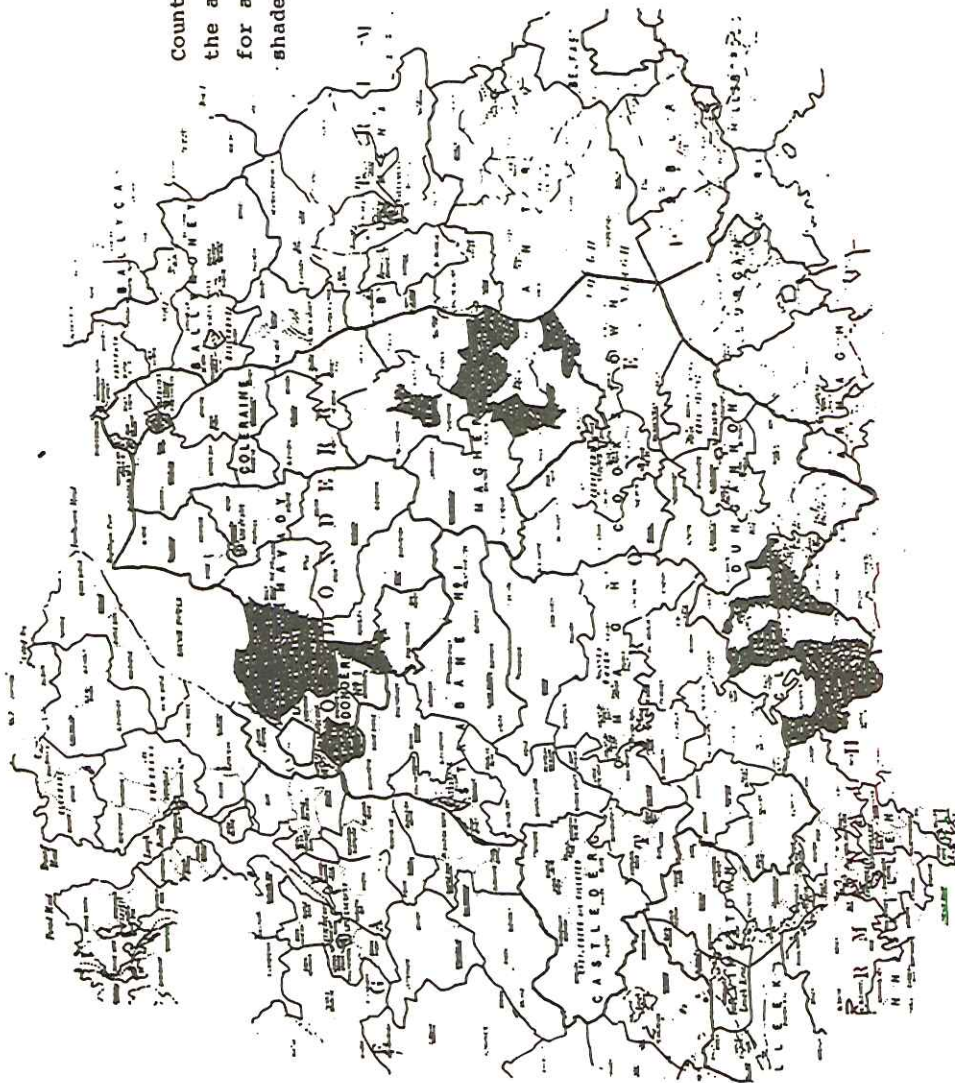
Figure I. Frequency Distribution of the ages given by women in
        1901 and 1911.

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