“WHAT HAPPENED IN THE SEVENTIES MUMMY?” PERIODICITY IN NZ FAMILY FORMATION

by

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WHY AN INTEREST IN PERIODICITY?

This paper is essentially reflective: it does not attempt a detailed empirical analysis. Instead, drawing its inspiration from three separate observations, it asks whether the era to which the FFS relates is one of very rapid transition, and whether or not the marked periodicity this implies is unprecedented. It thus raises questions which might well be worth pursuing in some, perhaps most, of the country studies in the FFS:

- To what extent are shifts in aspects of family formation concentrated by period?
- As a sub-question to this, to what degree is the era in which the FFS is sited one of unusually rapid transition?
- What might be co-variants of shifts in family formation?
- What are the possible implications of rapid period shifts?

The first observation comes from European demographers who have identified what they call a “second demographic transition” (Lesthaeghe, 1983; van de Kaa, 1987, 1988). They site this transition in the period following the Baby-Boom, from the late 1960s on.

Lesthaeghe (1991) has added important dimensions to this general observation. He shows that it took place almost simultaneously across most if not all Western countries, European and neo-European. He has also demonstrated that these changes took place in the context of major shifts in societal values, both those relating to the family and wider issues. This paper is a more in-depth review of one neo-Europe, New Zealand, for which unfortunately we do not have data on the sorts of values and attitudes that Lesthaeghe analysed.

Secondly, in the verbal presentation of their paper on cohabitation to the Beijing conference of the International Union for the Scientific Study of Population (IUSSP) Klijzing and Macura (1997) graphed the shifts from marriage to cohabitation as a preferred type of first union. What was most interesting in these graphs, which are not in the published version of their paper, is the high degree of similarity between FFS countries for the period in which this transition took place, regardless of the level of cohabitation achieved, with Sweden the highest and Poland the lowest. Their data essentially confirm the key features of Lesthaeghe’s argument.

Thirdly, the New Zealand survey contribution to the FFS (called NZWomen:Family, Employment, Education) has produced results in which the 1960s and 1970s, especially the latter decade, stand out as periods of intensely rapid change in terms of both family formation, and contraception and sterilization. These changes appear to coincide with other macro-level transitions occurring in the society (summarized in Pool et al 1999, esp. Chapt 9 and 11).

The rest of this paper looks at whether over the very long term the 1970’s stand out as a period of exceptional change. It then reviews key aspects of the transition indicated by the NZW:FEE data. A comparison is made with other FFS countries for some key indicators in order to determine whether or not this was a purely New Zealand phenomenon. In other words we test here one aspect of the Lesthaeghe argument but using some variables not used by him. Finally, we look at some implications of this.
DATA SOURCES

We use two data sources here. Both census and vital data are employed to provide longer term trends and thus a context for the NZW:FEE. Data from it and comparable and from other selected FFS surveys are used for the majority of the analyses.

We do not describe the methodology of the NZW:FEE study from which our data are drawn as we followed FFS protocols. Our methods and the quality of our data are described in the standard country report (Johnstone et al under editorial review) and in a longer, more detailed, internationally peer reviewed technical monograph (Marsault et al, 1997). The three major differences with the prototypical FFS survey are that we have no male survey, eligible respondents were drawn from age groups 15-59 years a wider range than normal, and our sample was relatively small (N=3017). Our questionnaire adhered closely to the model prescribed for the FFS except that we had virtually no attitudinal data. The reason for this latter decision was purely pragmatic – ours’ was the first nationwide survey of this sort, and we felt that we should concentrate on structural aspects of family formation.

This paper focuses on the Total and Pakeha populations (= majority population mainly of European descent). Nevertheless, we do present some results on Maori, the Polynesian minority population (11 percent of the female population aged 15-59 years), sometimes contrasting these results with Non-Maori (= mainly Pakeha, but also Asian, Pacific Island and other groups). We over-sampled Maori in a proportionately stratified probability sample and thus the results relating to the Maori minority are reasonably robust. Figures on the Total population are re-weighted so as to reflect actual distributions.

HISTORICAL CONTEXT OF THE PERIOD COVERED BY THE NZW:FEE

From vital registration and censuses between 1876 (= average of censuses of 1874 and 1878; from 1881 censuses were taken in March/April at regular 5-year intervals except 1931,1941, and Sept 1945 ) and 1996 it is possible to get data on two key dimensions of family formation: marital status (proportions in different categories at selected ages, from the census) and fertility (Total Fertility rates, TFR). Table 1 outlines these for ten yearly intervals, 1876-1996.

These data identify the period 1966-86 as one of very rapid change, from early marriage and relatively high fertility to later marriage and sub-replacement fertility. This period even stands out by comparison with the very rapid transition from the pioneer period at the end of the 19th century. During that earlier shift Pakeha New Zealand moved away from a pattern of early marriage and high fertility. This transition produced, in Gibson’s words, “the advent of the small family system”, and as a result the most rapid decline in reproduction seen in the industrialized countries in the late 19th century (Gibson 1971: Chapt VII).

Detailed analyses not presented here show an historically unprecedented shift in the period 1966-86 from early childbearing (in 1966 the Non-Maori age-specific fertility rate – ASFR -- at 20-24 years was higher than that at 25-29). Moreover, historically the most rapid
quinquennial declines in ASFRs at these key reproductive ages occurred between 1976 and 1981 (Pool and Jackson, 1994: Tables 2.3 and 2.4).

Table 1: Percent of Non-Maori Women Never Married at Ages 20-24 Years, and Total Fertility Rate, 1876-1991

<table>
<thead>
<tr>
<th>Year</th>
<th>Proportion Never-Married</th>
<th>TFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1876</td>
<td>57</td>
<td>6.69</td>
</tr>
<tr>
<td>1886</td>
<td>62</td>
<td>5.33</td>
</tr>
<tr>
<td>1896</td>
<td>75</td>
<td>3.88</td>
</tr>
<tr>
<td>1906</td>
<td>73</td>
<td>3.38</td>
</tr>
<tr>
<td>1916</td>
<td>70</td>
<td>3.10</td>
</tr>
<tr>
<td>1926</td>
<td>70</td>
<td>2.76</td>
</tr>
<tr>
<td>1936</td>
<td>72</td>
<td>2.10</td>
</tr>
<tr>
<td>1945</td>
<td>63</td>
<td>2.91</td>
</tr>
<tr>
<td>1956</td>
<td>43</td>
<td>3.79</td>
</tr>
<tr>
<td>1966*</td>
<td>39</td>
<td>3.26</td>
</tr>
<tr>
<td>1976</td>
<td>37</td>
<td>2.19</td>
</tr>
<tr>
<td>1986</td>
<td>65</td>
<td>1.86</td>
</tr>
<tr>
<td>1996</td>
<td>79</td>
<td>1.80</td>
</tr>
</tbody>
</table>

Sources: Marriage data 1876 and estimated TFRs to 1906, Gibson (1971: Tables 48 and 53); Censuses various years; Pool and Jackson (1994: passim); TFR 1996, unpublished provisional data, Statistics New Zealand.

* From 1996 the marital status data include Maori. The effect of this is limited, as there are high levels of intermarriage, and in any case more recently both groups have shifted dramatically to cohabitation at these ages (see below).

The New Zealand Baby-Boom was very long, reaching from 1943, when the first military echelon which had been overseas from early in 1940 had returned home and been replaced by the second, until about 1973. Rates rose rapidly in the mid 1940s, peaked at more than 4.0 births per woman around 1960, then declined rapidly in the 1960s, went up again around 1971 to relatively high rates (around 3.0), then went through a second rapid decrease in the 1970s. The highest quinquennial growth in the TFR, from 2.6 in 1942 to 3.2 in 1946 at the onset of the Baby-Boom, was exceeded by the velocity of the greatest declines from 4.0 to 3.2 (1961-65) and 3.0 to 2.3 (1971-75). Birth cohort sizes were historically highest last century in the Baby Boom with bi-modal peaks in 1961 and 1971. For Non-Maori adolescent fertility reached its highest level ever at the end of the Baby-Boom in 1971 (a Teenage Total Fertility Rate of 0.305 births per teenage woman), but has halved since then (Pool and Jackson, 1994: Table 2.3). The 1970s also saw the end of a period in which ex-nuptial conception was followed by precipitated marriage and nuptial birth (Pool and Crawford, 1980).
Maori followed a different transition. Marriage or entry into a first union has been at young ages since records became available (1926). The TFR remained high (more than 6.0) until 1962, but has since declined. Significantly, the most rapid decrease, probably the most rapid for a national population anywhere, “rivaling China’s”, occurred in the early 1970s, from 5.0 in 1971 to 3.0 in 1976, to 2.5 in 1981 (Pool, 1991: 175 & Table 8.2).

A CLOSER VIEW OF THE 1970s IN NEW ZEALAND: FAMILY FORMATION AND FERTILITY

We now look more closely at the 1970s, also making at times brief comments on adjacent decades. The data used in this section of the paper come entirely from the NZW:FEE. The data presented below mainly (but not entirely) are drawn from cohort experiences. Thus the changes we identify relate to the periods in which these cohort changes took place.

The 1970s saw a radical shift-share between marriage and cohabitation in terms of preferred form for a first union. This is shown in Figures One and Two, which should be viewed in tandem.

What is interesting is that Maori and Pakeha patterns and levels closely parallel one another. Both these new Zealand populations have relatively high levels of cohabitation, with levels resembling the Nordic countries, France and Quebec, but not surprisingly Anglophone Canada where rates are lower (Klijzing and Macura, 1997; Lapierre-Adamcyk et al 1997).

Figure One: Cumulative Proportions of Women Entering Marriage as a First Union

Source: This and all figures and tables in this section of the chapter come from NZW:FEE
The 1970s also saw a rapid rise in the adoption of contraception, as is shown in Figure Three. For older women, typically those who were married, who had a regular GP to whom they turned for obstetrical advice, pill-use had grown quickly during the 1960s, as is shown for the Non-Maori birth cohort of 1941-45 in Figure Four. But for the young unmarried there were constraints to access, so that even the New Zealand family planning association was criticized for providing such services (Dr Margaret Sparrow, pioneer of family planning services, cited Pool et al 1999: 110ff). By the 1970s, however, these barriers had been lifted and use spread rapidly to all women. Indeed the use of efficient contraception became the most common behaviour even for first intercourse, although the older the woman at that time the more likely to use a more efficient method, as is documented in Table 2.
Figure Three: Cumulative Proportion of All Women Who had Ever-Used Contraception (including Sterilisation) by a Given Age

![Cumulative Proportion of All Women Who had Ever-Used Contraception (including Sterilisation) by a Given Age]

Figure Four: Cumulative Proportion of Women by Ethnicity and Birth-Cohort Who had Ever-used the Contraceptive Pill

![Cumulative Proportion of Women by Ethnicity and Birth-Cohort Who had Ever-used the Contraceptive Pill]
Table 2: Percent of Women Using an Efficient method of Contraception at First Intercourse, by Age group at the Time of the Survey, by Age at First Intercourse, by Ethnicity

<table>
<thead>
<tr>
<th>Age at time Of Survey</th>
<th>First Intercourse Age at Circa</th>
<th>Non-Maori</th>
<th>Maori</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-29</td>
<td>≤16</td>
<td>65</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>17-19 1988</td>
<td>74</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>20+</td>
<td>72</td>
<td>--</td>
</tr>
<tr>
<td>30-39</td>
<td>≤16</td>
<td>48</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>17-19 1978</td>
<td>63</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>20+</td>
<td>65</td>
<td>39</td>
</tr>
<tr>
<td>40-49</td>
<td>≤16</td>
<td>31</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>17-19 1968</td>
<td>51</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>20+</td>
<td>59</td>
<td>30</td>
</tr>
<tr>
<td>50-59</td>
<td>≤16</td>
<td>20</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>17-19 1958</td>
<td>28</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>20+</td>
<td>53</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: -- Cell N’s very small

For Maori regional leadership conferences organized by Maori themselves, played a major role in advocating contraception in general and the pill’s adoption (Pool, 1991: 170). This extended also down to first intercourse although less dramatically and less systematically than

For both Maori and Non-Maori the acceptance of the pill probably had wider ramifications: a change in values and pervading societal attitudes relating to contraception, or what Murphy (1993) has called “macro-contraception”. This shift, we would speculate, opened the way for the ready acceptance of sterilization in the 1970s, a trend evident in Figure Five. The take-up of this method was very rapid and even for the cohort of 1946-50 extended down to women while they were still in their late twenties. This trend was possible only because of the force of reproduction being at adolescence and early adulthood. But once there had been a major shift in this force towards older ages, as occurred by the 1980s, sterilization rates began to decline firstly at these young ages, and then even at other ages. The increase and then decrease in sterilization by age and period is shown in Figure Six.
Figure Five: Cumulative Proportion of Women or their Partners, by Ethnicity and Birth-Cohort, Who had been Sterilised by a Given Age

![Cumulative Proportion Chart](chart1)

Figure Six: Percent of All Women in a Given Calendar Year, at Each Age Group, and Using Any Method of Contraception or Sterilisation, Who were Sterilised or Whose Partners were

![Percentage Users Chart](chart2)
Finally, the 1970s was a period in which the timing weighted towards very young ages and the extraordinary spacing patterns which had characterized the New Zealand Baby-Boom started to change. In Table 3 timing patterns are given. For the period for which life table analyses can be carried out, the most radical shift in these occurred between 1976 and 1981. The probability of having a birth by age 20 increased at the start of the 1970s – as noted earlier this was the peak era for teenage fertility – but then in the 1970s declined.

Table 3: Cumulative Proportion (percent) of Women having One and Two Births by 25 Years, by Period

<table>
<thead>
<tr>
<th>Year Women at 25 Years of Age</th>
<th>1976</th>
<th>1981</th>
<th>1986</th>
<th>1991</th>
</tr>
</thead>
<tbody>
<tr>
<td>One birth by 25</td>
<td>72</td>
<td>58</td>
<td>44</td>
<td>39</td>
</tr>
<tr>
<td>Two births by 25</td>
<td>48</td>
<td>17</td>
<td>11</td>
<td>11</td>
</tr>
</tbody>
</table>

Sceats (1978, 1981), employing regional surveys in each country, showed that Baby-Boom birth spacing produced very short birth intervals in New Zealand by comparison with Canada. Using the NZW: FEE and a cross-comparison with the United States, a more recent analysis confirms the exceptionally short nature of New Zealand Baby-Boom birth intervals. This latter study also demonstrated that the most rapid decrease in the proportions of women having a second birth within 24 and 36 months of the first came in the early 1970s (Morgan, et al 1998), accompanying and thus partly driving the rapid decline in the TFR at that time.

A CLOSER VIEW OF THE 1970s IN NEW ZEALAND: SOME CO-VARIATES

The 1970s was a period of rapid macro-social change which was probably interrelated with the transition in family formation that has just been described. A number of factors are identified here.

Firstly, the long term change in family structures commenced and accelerated at this time. This involved a shift from the two-parent household as the prime nuclear family form, to an increasing proportion of sole-parent and couple only households (Pool and Jackson, 1994; Dickson et al 1997). In part, of course, these structural changes were sequential to but a function of the shifts in family formation described above. In particular, the precocious childbearing and precipitate marriage of the Baby-Boom were related to high levels of formal marital dissolution first increasing very rapidly in the 1970s and then increasing a little more in the 1980s. Since the 1980s, however, rates of divorce have not increased and have gone back towards pre-1970 levels (Dharmalingam et al 1998: Table 3), and there was even a slight decline in the percent of women in sole parent households for Maori, Pakeha and Pacific islanders between the two most recent censuses (Dickson et al, 1997:Table 6.8). These structural changes have implications of major importance for policy.

The 1970s also saw changes in female educational participation rates. For example, the rates for completion of a first degree cycle before 25 years of age went through their most rapid
increase for the cohorts attending university in the 1970s (unpublished tabulation, NZW:FEE). Related to this was a rapid increase in female labour force participation occurred in the 1970s. It was only in the 1970s “that the distinctly bi-modal pattern of age-specific activity emerged, when returning to the labour force after childbearing became more common…” (Davies, 1993: 70).

Other major long term trends which changed direction in the 1970s related to the factors of income inequality and purchasing power. It has been shown, in the only such analysis available for New Zealand, that “post-war New Zealand has undergone two contrasting periods in the level and distribution of income: a period of gradual equalisation, and of incomes rising in real value, followed [from 1976] by a period of relatively rapid but also fluctuating dis-equalisation, and with incomes static or declining in real value” (Martin, 1998: 269).

Finally, we have no systematic data on values, but changes in religious affiliation give a lead to broad shifts in societal values. A very long-term census based analysis, running from the late 19th century settlement until the 1990s, identified the period from the late 1960s as one in which there has been rapid secularisation, most prevalent among early Baby-Boom birth cohorts (ie those persons at key ages for family formation in the 1970s), and also the growth of charismatic faiths (Young, 1997: Chapt 10)

**WHAT HAPPENED IN SOME SIMILAR FFS COUNTRIES?**

The FFS gives us an opportunity to compare New Zealand with a number of Western countries that share broadly the same social and economic conditions as New Zealand. This is done for three variables identified above as important indicators of changes in family formation in New Zealand: a decline by the end of the 1970s in the force of reproduction as measured by the propensity to have a first birth in adolescence; and changes in conjugal patterns measured by decreases in marriage as preferred first union and increases in cohabitation. Table 4 lists the direction of change in these for selected FFS country surveys.

**Table 4: Some Findings From Other FFS Countries: Were the 1970s Significant for Relatively More Rapid Changes in Adolescent Fertility, Marriage and Cohabitation, Yes or No?**

<table>
<thead>
<tr>
<th>Country</th>
<th>Decline Prob.of a Birth &lt;20</th>
<th>Decline Marriage</th>
<th>Increase Cohabitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Canada</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>France</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Norway</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Sweden</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

Source: Standard Country Reports, Tables 8 and 14.
This rather arbitrary analysis indicates that there is an issue at stake here, albeit that this result is hardly surprising as it merely confirms Lesthaeghe’s (1991) argument some year’s ago. But it does point to the need for an agenda for research on the determinants and consequences of these shifts. The results for New Zealand given above are merely exploratory, and we are at present extending it both statistically and substantively drawing on recently developed techniques.

SOME IMPLICATIONS OF RAPID PERIOD CHANGES

This paper has presented evidence of rapid period shifts concentrated in the 1970s, and from the data available has argued that this decade may have seen some of the most change in family formation for both Maori and Pakeha for the entire period for which information is available. The results confirm an argument elaborated earlier (1991) by Lesthaeghe, but for reasons of data availability a different set of co-variates from those he used has been analysed here. They point to the 1970s as a period of rapid transformation for a range of macro-social factors. These transitions of the 1970s then had consequences which extended well into the 1990s for factors such as family structures and divorce, and thus for policy. Finally, we have shown that New Zealand does not appear to be alone among FFS countries undergoing a shift in family formation from earlier to later childbearing, and from marriage to cohabitation as the preferred first union.

These findings have implications which reach far beyond their inherent interest historically. They are of intrinsic importance for policy.

We must recognise that the rapid changes for Pakeha New Zealand in the 1970s followed only thirty years after the sudden onset of the Baby-Boom. The previous period of accelerated change had been almost a century earlier. Thus this paper has pointed not only to what has been the most rapid Pakeha family formation transition on record, but we have also seen an acceleration in such perturbations.

Both Maori and Pakeha saw radical transitions in family formation and use of contraception in the 1970s, as we documented earlier. This means therefore not only that the ethos of change may have accelerated, but that it crossed to different sections of the society crossing cultures, and bringing closer together what had until then been very different transitions.

Additionally, we have also identified in New Zealand some incipiently rapid changes emerging in the 1990s for the youngest cohorts, including a shift away from cohabitation, but an increase in unions which are intimate but where the couple live apart. Furthermore, young New Zealand cohorts have adopted condom use with almost as much enthusiasm as their mothers took on the pill, but the young very often use the two together.

A review of the standard report tables of the other countries covered here suggest that their youngest cohorts may also be on the verge of further transitions, although sometimes, because of possible truncation effects this may be more apparent than real. An example would be that for Austria, Canada, France, Netherlands and Norway the propensity to be in a consensual union before 20 years peaked in the 1980s.
The key point here is not whether or not we may be seeing the onset of another period of rapid change; the issue is whether we are monitoring this change so that we can identify and project forward the consequences of events that may be coming with accelerating frequency, and which may have very long-term consequences. The monitoring system established by Gerard Calot at INED and now continuing under his direction in Paris provides an indication of short-term changes, but we also need to be able to observe in detail the many dimensions of such a transition. Only FFS type surveys permit this type of analysis.

A major conclusion of this paper is then the need to continue FFS type observations. But it remains how this can be done in both a timely and cost-effective way. We are investigating this possibility in New Zealand at present by experimenting with a much shorter questionnaire focussing on critical factors, and that can be employed in “inter-NZW: FEE periods”.

REFERENCES


