



ドイツ日本研究所 German Institute for Japanese Studies (DIJ)

International Symposium

November 6th and 7th, 2008 at the Center for the Advancement of Working Women (CAWW)

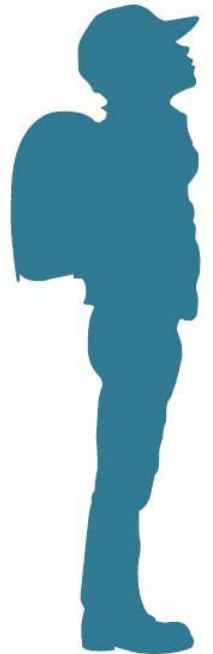
Fertility and Social Stratification Germany and Japan in Comparison

Thursday, November 6th, 2008

Section 3: Region

“Inter-Prefectural Differences of Fertility and Marriage Behavior in Japan”

PowerPoint by **Ralph Lützeler**
(German Institute
for Japanese Studies)



If you use any information from this presentation, please have the courtesy to properly cite this source. Thank you.

Inter-prefectural Differences of Fertility and Marriage Behavior in Japan

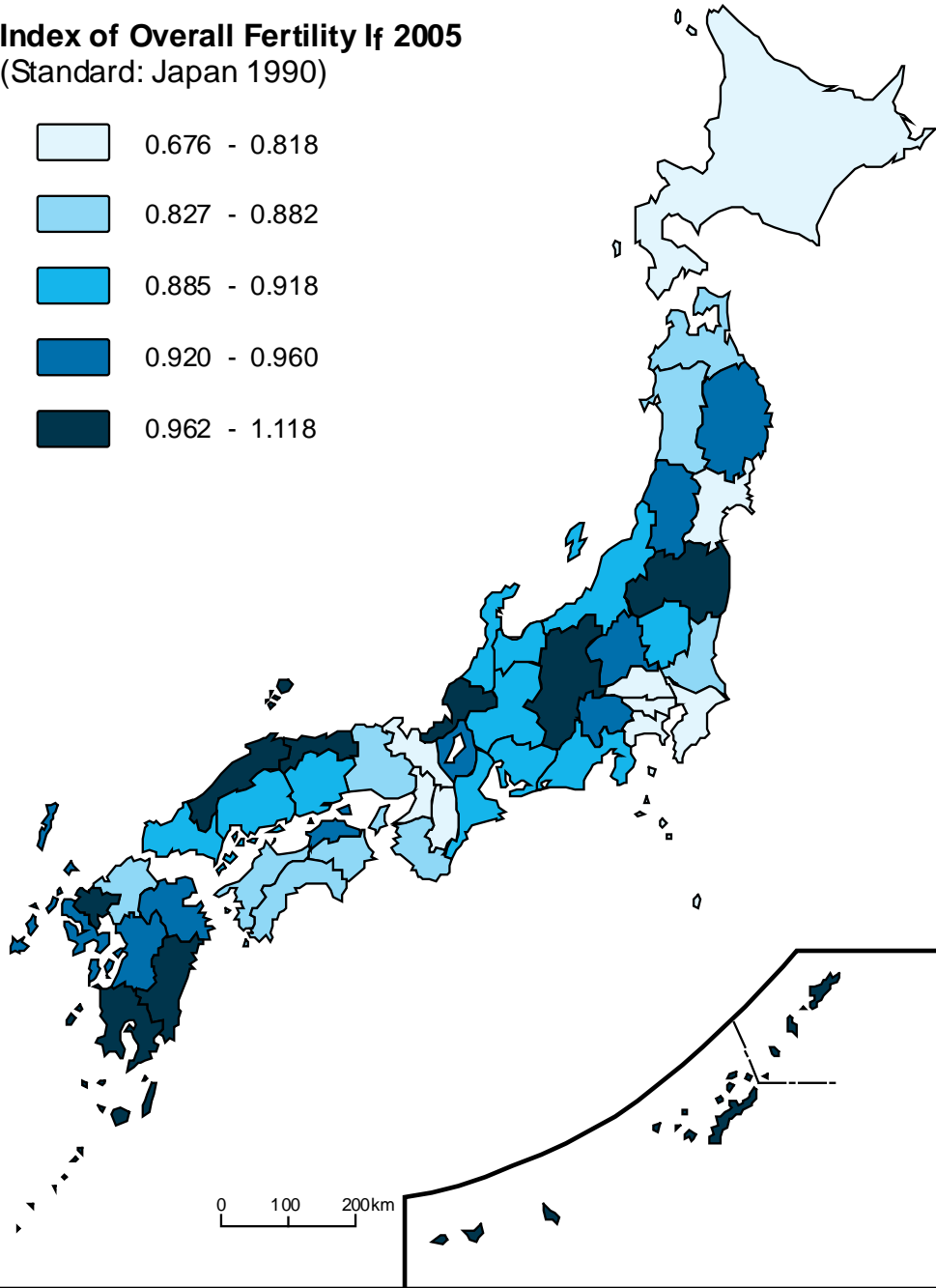
Ralph LÜTZELER

German Institute for Japanese Studies, Tōkyō (DIJ)

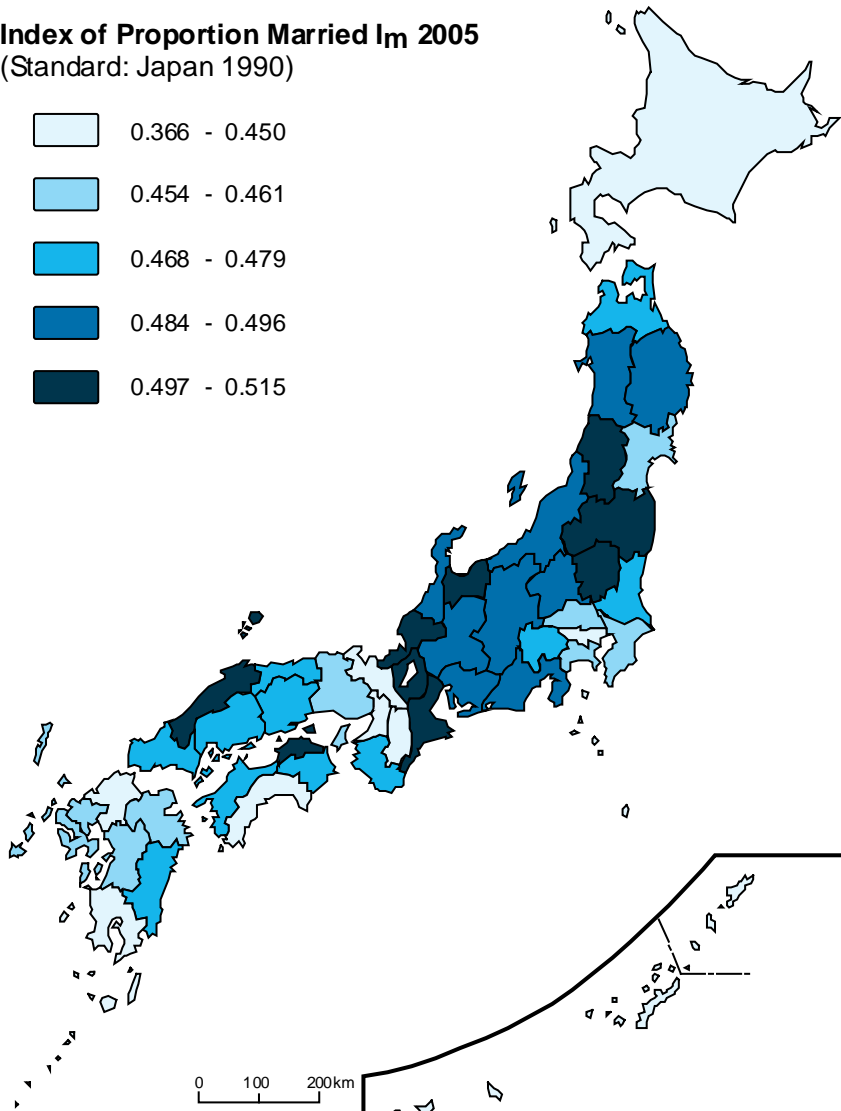
Main research questions

- (1) How has the Second Fertility Transition spread across Japan? Was it a diffusion-like process, or did the changes commence almost at once in many locations? Are there regions that still do not correspond to the new fertility regime?
- (2) What are the main factors that can be associated with the current regional fertility patterns in Japan? Do local cultural factors play a prominent role, or are regional differences merely reflecting varying socio-economic characteristics of populations? And what about the impact of infrastructural factors?

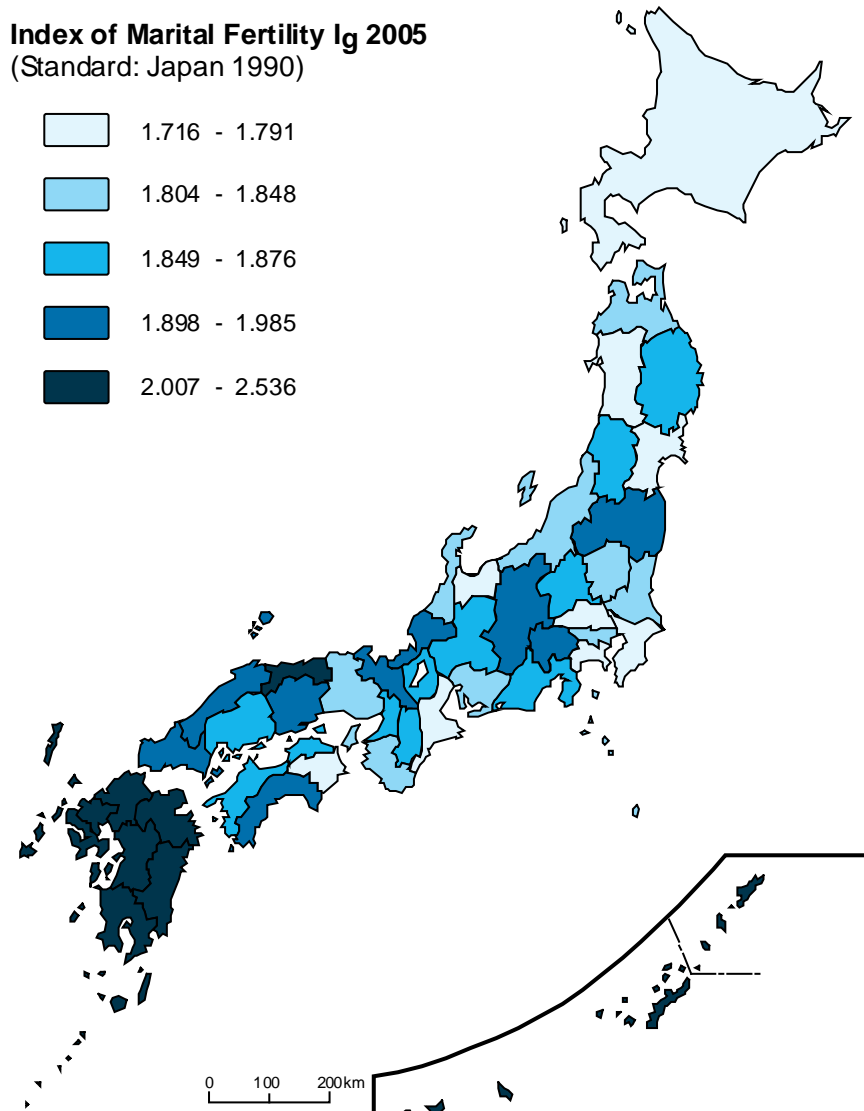
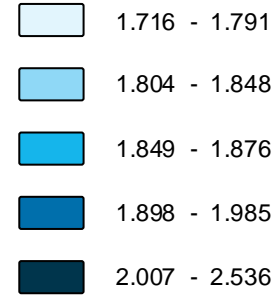
Index of Overall Fertility If 2005 (Standard: Japan 1990)



Index of Proportion Married I_m 2005
(Standard: Japan 1990)

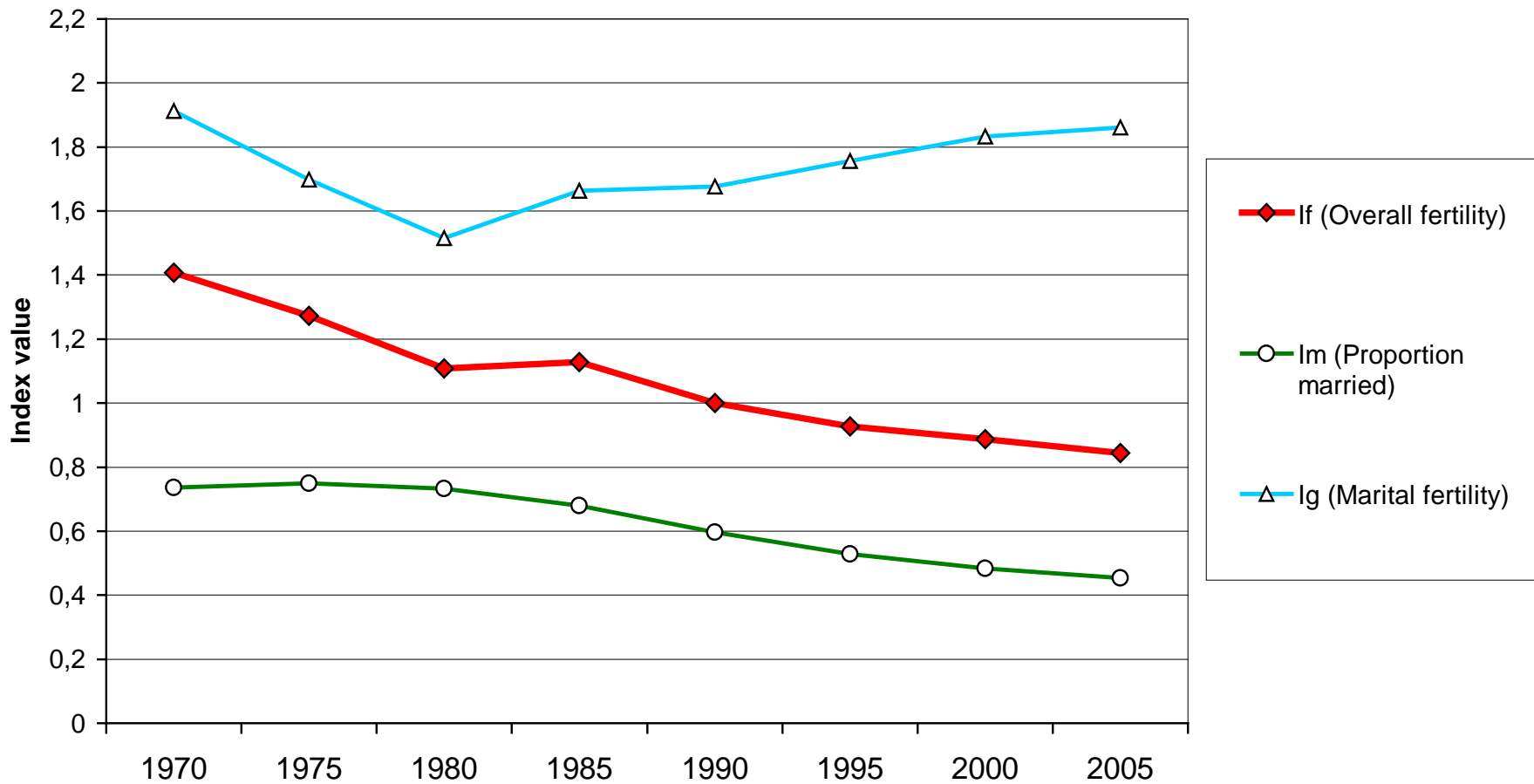


Index of Marital Fertility I_g 2005
(Standard: Japan 1990)



Hutterite index change, Japan 1970-2005

(Standard age-specific fertility schedule: Japan 1990)

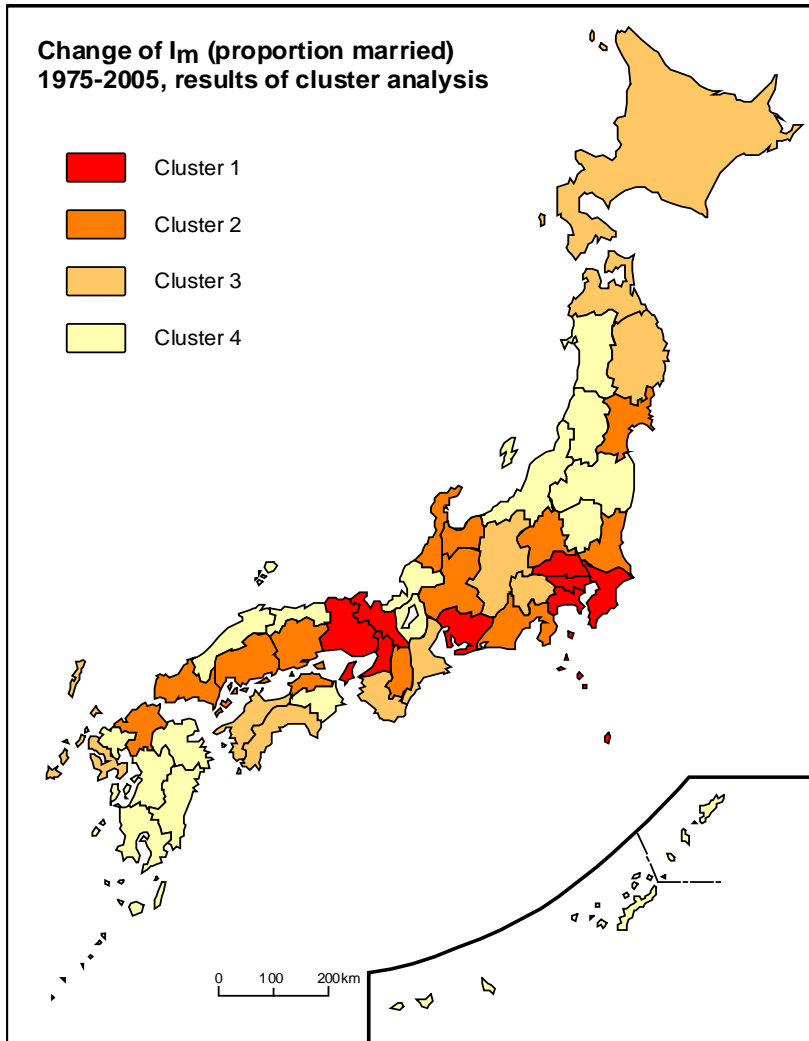


Correlation coefficients: Overall fertility (I_f) to proportion married (I_m) and marital fertility (I_g)

(inter-prefectural distribution patterns, 1970-2005)

| Year | 1970 | 1975 | 1980 | 1985 | 1990 | 1995 | 2000 | 2005 |
|-------------|--------|--------|--------|-------|-------|-------|-------|-------|
| $I_f : I_m$ | -0.182 | -0.166 | -0.076 | 0.183 | 0.577 | 0.656 | 0.580 | 0.561 |
| $I_f : I_g$ | 0.913 | 0.898 | 0.858 | 0.747 | 0.619 | 0.730 | 0.763 | 0.676 |

“ I_m ” percent change 1975-2005: Results of cluster analysis



| | cluster 1 | cluster 2 | cluster 3 | cluster 4 |
|----------------|--------------|--------------|--------------|--------------|
| 1975-80 | -3.0 | -1.4 | -2.1 | -0.9 |
| 1980-85 | -8.9 | -6.2 | -6.3 | -4.5 |
| 1985-90 | -14.1 | -11.4 | -9.5 | -8.6 |
| 1990-95 | -11.5 | -12.3 | -10.1 | -11.1 |
| 1995-00 | -7.3 | -8.7 | -9.0 | -10.1 |
| 2000-05 | -5.2 | -6.4 | -7.0 | -7.9 |
| 1975-05 | -41.6 | -38.5 | -36.9 | -35.6 |

Correlation and regression coefficients: Change in proportion married 1975-2005

| Independent variable | Correlation coefficient | Beta coefficient |
|--|-------------------------|------------------|
| Percent change of gainfully employed women aged 25-34 years, 1975-2005 | -0.685 | -0.658 |
| Percent change of respondents agreeing that “to marry is natural”, 1978-1996 | 0.331 | 0.264 |
| <i>Percent variance explained (R^2)</i> | 53.8 | |

Correlation and regression coefficients: Proportion married 2005

| Independent variable | Correlation coefficient | Beta coefficient |
|---|-------------------------|------------------|
| Work force in manufacturing or construction occupations, 2005 (%) | 0.839 | 0.701 |
| Respondents agreeing that “to marry is natural”, 1996 (%) | 0.623 | 0.294 |
| <i>Percent variance explained (R^2)</i> | 77.1 | |

Correlation and regression coefficients: marital fertility 2005

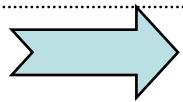
| Independent variable | Correlation coefficient | Beta coefficient |
|--|-------------------------|------------------|
| Okinawa (Okinawa=1; other prefectures=0) | 0.667 | 0.576 |
| Respondents having “strong attachment to family ancestors”, 1996 (%) | 0.388 | 0.347 |
| High school graduates going on to university education, 2005 (%) | -0.449 | -0.242 |
| Children in day nurseries, 2005 (% of all children entering elementary school) | 0.053 | 0.212 |
| <i>Percent variance explained</i> | 71.9 | |

Main results

- (1) Changes in the regional pattern of overall fertility since the mid-1970s were correlated with a decline in the propensity of women to marry. This decline started in the major metropolitan areas due to gradual improvements in employment opportunities for women. It then spread diffusion-like towards the periphery of Japan.
- (2) A marked contrast between higher proportions of married women in most of northeastern and central Japan and lower proportions in Hokkaidō, the Tōkyō Metropolitan Area, and southwestern Japan has remained. In part, this pattern dates back as far as the late Tokugawa Period. More important, however, are differences in the occupational composition of the work force.

Main results, cont'd

- (3) The regional pattern of marital fertility is marked by high rates in Okinawa and Kyūshū and average to low rates elsewhere. The influence of differing levels of urbanization is negligible. Instead, socio-cultural factors seem to play the leading role in effecting this pattern.



Impact on fertility of frequently discussed socio-economic or structural indicators exists at the regional level, but historical and socio-cultural determinants are important as well. Cultural and historical factors might be a key to improve our understanding of national fertility levels and trends.