

The Cultural Revolution Depressed Educational Homogamy in Urban China

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Table: Table 1-Table 2

Figure: Figure 1

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Abstract

This paper demonstrates that the Cultural Revolution led to a temporary decline in educational homogamy in urban China, which was reversed when the Cultural Revolution ended. Previous studies on educational homogamy in China have paid incomplete attention to China's shifting institutional structures. This paper applied institutional theory to the trend of educational homogamy in urban China. During the Cultural Revolution (1966-76) state policies lowered educational legitimacy, educational homogeneity, and mating opportunities in school in the urban marriage market while enhancing them before and after. From the institutional perspective I hypothesized that the strength of educational homogamy in urban China during the Cultural Revolution was weaker than before and after. I used log-multiplicative layer effect models to analyze data representative of urban residents in twenty cities. I found moderate but significant evidence for the institutional hypotheses. Educational assortative mating is subject to political intervention in urban China.

The Cultural Revolution Depressed Educational Homogamy in Urban China

This study adds to the institutional literature on political factors and status homogamy (Ultee and Luijkx 1990), by asking whether unique political changes shaped the trend of educational homogamy in urban China, using data representative of residents in twenty cities. I first describe how political climates changed educational value, educational homogeneity (i.e., educational similarity), and mating opportunities in school in the marriage market of urban China over time, to which previous studies have paid incomplete attention. Next, I propose institutional theory and hypotheses, and describe data and methods. After reporting findings, I conclude with implications for future studies.

Shifting Institutional Structures in Urban China

Each society has multiple institutions. This paper focuses on one of them, macro-level state policies. Volatile state policies are typical of modern China. Their influences have been enhanced by the political centralization of China as a state socialist country since 1949. To introduce Chinese modern history, I employ a tripartite categorization of historical periods based on unique variations in state policies and available data: the pre-Cultural Revolution era (1949-65), the Cultural Revolution (1966-76), and the post-Cultural Revolution era (1977-94). In brief, state policies weakened educational value, educational homogeneity, and mating chances in school in the urban marriage

market during the Cultural Revolution and strengthened them before and after.

During the first period (1949-65), state policies powerfully institutionalized educational achievement as the pathway to status attainment, and highly valued education in urban matchmaking. Confucianism, with its strong respect for education and teachers, dominated Chinese culture for about two thousand years until the Cultural Revolution (1966-76). The new socialist state government established in 1949 gave priority to efficient economic recovery after years of wars. It aimed for massive educational development and supported intellectuals. According to Chairman Mao Zedong, “To resume and develop people’s education was one of current key tasks” (1951) and “Intellectuals are also laborers” (1957).¹ Specifically, school admission required an entrance examination; urban “key-point” schools received more resources for training future elites; and the allocation of occupation and income was largely based on academic performance (Parish 1984; Unger 1982). Consequently individuals, especially the college educated, were very likely to meet potential mates in school; individuals with more education, especially intellectuals, were favorable partners (Croll 1981, 1984; Whyte and Parish 1984).

Two specific policies in this period reinforced educational value, educational homogeneity, and opportunities for mating in school in the urban marriage market. First, the new communist government dramatically expanded educational opportunities for women to reduce gender inequality (Hooper 1991; Lavelly et al. 1990). This policy raised educational preference in mate selection for both gender groups, increased educational

similarity between the two gender groups, and created more mating possibilities in school. Second, in 1955 the government established the household registration system -- still in effect today -- to constrain rural-urban migration. Rural-urban educational inequality was long lasting (Hannum 1999). This system intensified the importance of education by allowing rural-urban migration through educational achievement (Wu and Treiman 2004). It also enhanced educational homogeneity in urban China by blocking educationally incompatible rural mates.

Another institution, the Marriage Law of 1950, deserves discussion. It disrupted traditional arranged marriage and legalized free choice marriage (Yang 1959). This legislation had two possible consequences. On the one hand, it could have maintained traditional status matching, “match doors and households,” but changed the selection base from family freedom to personal freedom. On the other hand, it could have paved the way for love marriage. Individuals were freer to choose matches based on romantic affection. In reality, status matching instead of love matching remained dominant after 1950 (Croll 1984; Whyte and Parish 1984). Individuals preferred to use their marriage freedom to pick partners based on materialist criterion, including education.

During the second period, the ten-year Great Proletarian Cultural Revolution (1966-76), radical destratification policies took priority for reversing the social order, and weakened educational value in urban China in three extreme ways. First, the impact of education as an intragenerational stratification mechanism decreased. Meritocracy was replaced with political loyalty as the standard of educational admission and occupational

allocation, and with equalization as the criterion for income distribution (Parish 1984; Unger 1982; Walder 1990; Xie and Lin 1986; Zhou 2000). Second, the significance of education as a reproduction mechanism of stratification also declined. Egalitarian policies broke the intergenerational heritage of status (Deng and Treiman 1997; Parish 1984; Xie and Lin 1986; Zhou, Moen, and Tuma 1998). Father's education could not guarantee educational and occupational attainment of children. Further, the traditional cultural status of education as highly valued was attacked. Destratification policies severely criticized Confucianism and labeled intellectuals, including teachers, as the lowest of the low in political status. According to Chairman Mao, "The phenomenon of our schools being dominated by bourgeois intellectuals could not be continued" (1966).² Formal education was disrupted in urban areas. Many universities and high schools were permanently closed (Unger 1982). The proportion of high school and college graduates decreased drastically (Zhou, Tuma, and Moen 1996). As a result, individuals, especially the highly educated, were less likely to meet a match in school than before. Education in general was no longer a noticeable criterion in mate selection for each gender group in the 1970s (Whyte and Parish 1984).³ With the strength of educational barriers weakened, the chance of marriages crossing educational boundaries increased (Croll 1983, 1984).

Another radical policy in this period, the Sent-Down Movement, also devalued education. It sent twelve million urban youth to the underdeveloped countryside between 1968 and 1975 to reduce urban job market pressure and urban-rural inequality (Bernstein 1977; Zhou and Hou 1999). This policy discouraged urban children from school

attendance when faced with a rural future (Parish 1984; Unger 1982), and decreased their mating opportunities in school. It also increased possibilities for the sent-down youth to marry less-educated rural residents (Croll 1981, 1984). These rural-urban intermarriages only decreased the strength of educational homogamy in urban China during that time when these couples moved back to cities.

During the third period, the post-Cultural Revolution era (1977-94), political priority returned to efficient economic development. Educational value regained its strength in urban China. To achieve market-oriented economic reform, the government resorted to education and honored intellectuals. In 1978 the new chairman Deng Xiaoping stated, “Scientific technology is the production force” and “Intellectuals are part of the proletariat.”⁴ In 1984 Teachers’ Day was established.⁵ Meritocracy resumed, including “key-point” schools and entrance examinations based on academics. The national college entrance examination in particular resumed in late 1977. Economic returns to education rose substantially over time (Zhang et al. 2005; Zhao and Zhou 2002; Zhou 2000; Zhou et al. 1996). Education became increasingly prominent as a criterion for selecting a mate. Consequently individuals, especially the college educated, were more likely to meet potential partners in school than during the Cultural Revolution. Also, an upsurge of divorce appeared in the early 1980s, due to the reestablished importance of education (Platte 1988). Individuals who achieved promotion through higher education, occupational mobility, or migration to urban areas left their spouses behind; intellectuals who had married peasants or workers to avoid political torture during the Cultural

Revolution now regretted their decision and dissolved their marriages (Croll 1983, 1984).

Additionally, the household registration system continued to enhance urban educational homogeneity.

Previous Evidence: The Trend of Educational Homogamy in China

Several studies have examined the trend of educational homogamy in China. Their focus is incomplete. Pioneering studies give qualitative evidence (Croll 1981, 1983, 1984; Huang 1962; Parish 1984; Whyte and Parish 1984; Yang 1959), and shed light on how political changes influenced educational assortative mating. Three quantitative analyses (Raymo and Xie 2000; Smits, Ultee, and Lammers 2000; Smits 2003) consistently find a trend of decrease, while paying limited attention to shifting state policies. Two of them (Smits et al. 2000; Smits 2003) use log-linear models to analyze a 1 percent sample from the China 1982 Census data. It restricts analysis to husbands aged twenty-three to fifty-two and wives aged twenty to forty-nine, whose marriages range from the 1940s to 1982. It uses the wife's age of thirty-three as a cutoff, and constructs two marriage cohorts. A certain proportion of marriages in both cohorts could occur during the Cultural Revolution. Another study (Raymo and Xie 2000) employs log-multiplicative layer effect models to examine community-level data from the 1985 In-Depth Fertility Survey of ever-married women under age fifty in three provinces. It creates two marriage cohorts (1970-74 and 1984-85). Apparently the first cohort lies within the middle of the Cultural Revolution, and the second at the earlier stage of the economic reform era.

One study focuses on the effects of political shifts, while finding limited evidence of such effects (Xu, Ji, and Tung 2000). It creates three marriage cohorts based on historical contexts (1933-57, 1958-76, and 1977-91). Its log-linear analyses find one significant result but from a poor-fit model: the likelihood of an intermarriage between a person with at least middle school education and a person with less than middle school education increased from the earlier marriage cohort (1933-57) to the “high Maoism” marriage cohort (1958-76). This study tentatively concludes that political shifts do not influence educational homogamy in urban China. Although this study is praiseworthy, it has limitations. Its data came from two separate cross-sectional community surveys collected in two different cities at two different points of time. The generalizability and representativeness of its findings can be questioned. Also, its limited samples do not allow a separate cohort for the Cultural Revolution. It is during those ten years that educational legitimacy, educational homogeneity, and mating chances in school were influenced most radically. In addition, this study does not discuss in detail how state policies shape educational homogamy over time.

The present article extends the literature on the trend of educational homogamy in China in two ways. First, I use more recent quantitative data, representative of urban residents in twenty cities in China. They measure education at the time of respondent’s first marriage. Second, I distinguish three marriage cohorts based on the above detailed description of political shifts in urban China. I label those who got married during the Cultural Revolution as one distinct cohort.

Institutional Theory and Hypotheses

Institutional theory provides a dynamic approach to study stratification processes across space and time (Ganzeboom, Treiman, and Ultee 1991; Kerckhoff 1995; Mayer and Schoepflin 1989; Ultee and Luijkx 1990; Smits and Park forthcoming). It states that different institutions produce diverse inequality patterns across space, and shifting institutions create weaving stratification trends over time. Based on the above description of shifting state policies in urban China, I propose three mechanisms through which political arrangements influence the strength of educational homogamy: the legitimacy of education, the degree of educational homogeneity, and the mating opportunities in school.

First, the extent to which political arrangements institutionalize the value of education is positively associated with the strength of educational homogamy (Sorokin 1959; Weber [1946] 1958). In political contexts that legitimate educational value to a greater degree, the educational criterion in spouse choice will be more prominent. Individuals will have a higher preference for mates with more or at least equal education. Even if choosing mates with less education than themselves, individuals are more inclined to pick mates with relatively more education. Consequently educational distances between spouses will be less dispersed, and education homogamy will be stronger. Second, the degree to which political arrangements enhance educational homogeneity in the marriage market has a positive association with the degree of educational homogamy. The more similar the educational levels among marriage

candidates, the smaller the educational distances between spouses. Additionally, the extent to which political arrangements create possibilities for mating in school is also positively associated with the degree of educational homogamy. The greater the opportunity for meeting a match in school, the smaller the educational differences between spouses.

As described above, state policies weakened educational value, educational homogeneity, and opportunities for mating in school in the urban marriage market during the Cultural Revolution and strengthened them before and after. From the institutional perspective I extract two hypotheses. If the results support these hypotheses, the trend of educational homogamy in urban China will display a V shape.

H1: The strength of educational homogamy in urban China during the Cultural Revolution will be lower than before the Cultural Revolution.

H2: The strength of educational homogamy in urban China during the Cultural Revolution will be lower than after the Cultural Revolution.

Data and Methods

Data

Data are from the survey “The State and Life Chances in China from 1949-1994”. They were collected in 1993-94 from a representative sample of urban residents in twenty cities through multistage stratified random sampling (for more information about data,

see Zhou et al. 1998). A total of 4,073 respondents aged twenty-five to sixty-five provided retrospective information regarding educational trajectory and marital history.⁶ Spouses were also interviewed for married respondents. I deleted respondents who were single (N=421), ever divorced (N=47), ever widowed (N=91), remarried (N=5), or married prior to 1949 (N=42), and others with incomplete information on their or their spouses' educational trajectory (N=217). The final sample includes 3,250 couples in respondent's first marriage.⁷ Retrospective data on educational trajectory and marital history help identify spouses' highest levels of completed education at the time of respondent's first marriage.⁸ I employed the four-level educational classification as in previous studies (Raymo and Xie 2000; Xu et al. 2000): elementary school or less, junior high school, senior high school, and university and above. Based on distinct political climates, I constructed three marriage cohorts: those getting married between 1949 and 1965 (N=759), between 1966 and 1976 (N=692), and between 1977 and 1995 (N=1,799). The cross-tabulations of spouse's education by marriage cohort are presented in Table 1.⁹

[Insert Table 1 about here](#)

Methods

I applied the log-multiplicative layer effect model (Xie 1992) for the three-way contingency table of wife's education (*W*), husband's education (*H*), and period (*P*). The model assumes that the shift in educational homogamy can be identified by "a common

association pattern and a table-specific parameter” (Xie 1992: 380). It is parsimonious and flexible for comparative studies of stratification (Xie 1992, 1998). It can compare the strength of educational homogamy across three historical periods.

Equation 1 represents the saturated model for the three-way table. F_{ijl} is the predicted number of marriages between wives of education i to husbands of education j ($i, j = 1, \dots, 4$) during time period l ($l = 1, 2, 3$). This model contains all possible interaction terms among W , H , and P . Equation 2 fits the log-multiplicative layer effect model. It reduces the last two terms in equation 1 to $\exp(\psi_{ij}\phi_l)$ in equation 2, where ψ_{ij} represents the common association pattern between W and H ; ϕ parameters indicate period-specific association strength.

$$F_{ijl} = \tau_0 \tau_i^W \tau_j^H \tau_l^P \tau_{il}^{WP} \tau_{jl}^{HP} \tau_{ij}^{WH} \tau_{ijl}^{WHP} \quad (1)$$

$$F_{ijl} = \tau_0 \tau_i^W \tau_j^H \tau_l^P \tau_{il}^{WP} \tau_{jl}^{HP} \exp(\psi_{ij}\phi_l) \quad (2)$$

Results

I began analyses with raw odds ratios for a simple picture of the trend of educational homogamy in urban China (Rosenfeld, forthcoming). As institutional theory predicts, respondents with university degrees or above were more likely during the Cultural Revolution than before and after to marry those without university degrees rather than those at the same educational level. This prediction receives support from odd ratios. The chances of marrying mates with university degrees or above were 16.10 times greater for

men with university degrees or above than for men without university degrees during the Cultural Revolution,¹⁰ while 44.69 times greater before, and 29.70 times greater after.¹¹

Insert Table 2 about here

Next I used models for a better description of the trend of educational assortative mating in urban China. As Table 2 shows, I specified five models as in previous studies for replication (Raymo and Xie 2000): one log-linear model (Model 1) and four log-multiplicative layer effect models (Models 2, 3, 4 and 5). Model 1 is the conditional independence model as the baseline for predicting the degree of homogamy and its variation by period (Xie 1998). It fits the marginal distributions of spouses' education by marriage cohort, and assumes no association between W and H at each period. I specified two design matrices for the WH association in log-multiplicative layer effect models (Raymo and Xie 2000: Figure 1): Models 2 and 3 fit the main diagonal; Models 4 and 5 add, in addition to the diagonal parameters, parameters for the three distinct distances from the main diagonal. Furthermore, Models 2 and 4 are time homogenous models, constraining the ϕ parameters to be constant over time. Models 3 and 5 are time heterogeneous models, allowing the ϕ parameters to vary by period.

For each model I report the degrees of freedom; the ϕ parameter estimates where relevant; and estimates from four goodness-of-fit criteria: the log-likelihood ratio chi-square statistic (L^2), the Bayesian Information Criterion (BIC; Raftery 1995),

Akaike's Information Criterion (AIC; Akaike 1974), and the index of dissimilarity (Δ).

By multiple model-selection criteria, Model 1 is a poor fit to the data ($L^2 = 914.74$, $d.f. = 27$, $p < .0001$; BIC=696.41; AIC=860.74). As the dissimilarity index shows, nearly 20 percent of observations needed to be reclassified to make all observed cell counts exactly equal to the fitted cell counts.

Models predicting the diagonal parameters are still not good fits to the data while substantially improving the baseline model in goodness-of-fit. For the time homogeneous model (Model 2), L^2 is 207.78 ($d.f.=23$, $p < .0001$); BIC is 21.79; AIC is 161.78. For the time heterogeneous model (Model 3), L^2 is 204.89 ($d.f.=21$, $p < .0001$); BIC is 35.08; AIC is 162.89. For both models, more than 6 percent of observations needed to be reclassified to make the fitted model exactly correct.

Models estimating parameters for both the diagonal and the off-diagonal distances fit the data better than others. For the time homogenous model, L^2 is reduced from 207.78 (Model 2) to 28.67 (Model 4) for only two additional degrees of freedom ($p < .001$). For the time heterogeneous model, L^2 is reduced from 204.89 (Model 3) to 22.62 (Model 5) for only two additional degrees of freedom ($p < .001$). There are also substantial reductions in BIC and AIC. For the time homogenous model, they are respectively reduced from 21.79 and 161.78 (Model 2) to -141.14 and -13.33 (Model 4). For the time heterogeneous model, they are respectively reduced from 35.08 and 162.89 (Model 3) to -131.02 and -15.38 (Model 5). For Models 4 and 5, only more than 2 percent of observations needed reclassification.

Furthermore, Model 5 is preferable over Model 4 according to AIC and the dissimilarity index as well as L^2 . Taking parsimony into account for L^2 , I conducted the Chi-Squared test. For 2 degrees of freedom, Model 5 reduces L^2 of Model 4 by 6.05, which is moderate but significant ($p < .05$). Also note that Model 4 is a little better according to BIC. Given the base of BIC on approximation (Powers and Xie 2000) and its too-severe penalty for additional parameters with great samples (Weakliem 1999), I prefer Model 5 over Model 4 based on L^2 , AIC, and the dissimilarity index. The theoretical strength of institutional hypotheses also prefers Model 5. ¹²As the ϕ parameters in Model 5 show, the strength of educational homogamy before the Cultural Revolution is .61 (Figure 1). It declines to .49 during the Cultural Revolution, but increases to .62 after the Cultural Revolution. This V-shaped trend supports two institutional hypotheses in this article (H1, H2).

Insert Figure 1 about here

Conclusions

This article applies institutional theory to the trend of educational homogamy in urban China. State policies lowered educational legitimacy, educational homogeneity, and opportunities for mating in school in the urban marriage market during the Cultural Revolution (1966-76) while enhancing them before and after. From the institutional perspective I hypothesized that in urban China the strength of educational homogamy

during the Cultural Revolution was weaker than before and after. I used log-multiplicative layer effect models to analyze data representative of urban residents in twenty cities. I found moderate but significant evidence for the institutional hypotheses. Educational assortative mating is subject to political intervention in urban China.

This article reports a V-shaped trend based on data limited to twenty cities, contrary to previous evidence for a trend of decrease (Raymo and Xie 2000; Smits 2003; Smits et al. 2000). Future studies are needed in the face of mixed results. This inconsistency issue can be solved through major efforts in conceptualizations of marriage cohorts and selections of data. Regarding the construction of marriage cohorts, future studies should categorize marriage cohorts in terms of historical periods in order to capture effects of political shifts. Furthermore, future studies should choose data based on their research interests. They can use census data to determine the exact national trend over time. They should also examine rural and urban data separately for two major institutional reasons. One reason is the persistent rural-urban gap in educational resources and opportunities (Hannum 1999). The other reason is that political changes could influence the spouse choice of urban residents to a greater degree. Cities are centers of politics and culture in China. The primary targets of the Cultural Revolution--higher education, intellectuals, and sent-down youth--were also urban based.

Notes

1. Ministry of Education of the People's Republic of China. 2005a. "Great Educational Events for Fifty Years (1949-1959)." Retrieved January 1, 2005 (<http://www.moe.edu.cn/edoas/website18/info4984.htm>).
2. Ministry of Education of the People's Republic of China. 2005b. "Big Educational Events for Fifty Years (1960-1969)." Retrieved 1 January, 2005 (<http://www.moe.edu.cn/edoas/website18/info4985.htm>).
3. Whyte and Parish (1984) asked respondents to list the top seven criteria of spouse selection in the 1970s. Education did not appear on the list for either male or female respondents.
4. Ministry of Education of the People's Republic of China. 2005c. "Big Educational Events for Fifty Years (1970-1979)." Retrieved 1 January, 2005 (<http://www.moe.edu.cn/edoas/website18/info4986.htm>).
5. Ministry of Education of the People's Republic of China. 2005d. "Big Educational Events for Fifty Years (1980-1989)." Retrieved 1 January, 2005 (<http://www.moe.edu.cn/edoas/website18/info4987.htm>).
6. The quality of retrospective reporting on surveys is quite high, especially for personally salient events such as marriage (Beckett et al. 2001; Lillard and Waite 1990).
7. Out of these 3,250 couples, there are 114 couples in which both husband and wife were ever sent down, 181 couples with only husband ever sent down, and 180 couples with only wife ever sent down. All these sent-down individuals returned to cities later,

since the data were collected from a representative sample of urban residents in twenty cities.

8. Supplemental analysis based on spouses' highest level of noncompleted education finds similar results. Results are available upon request.

9. Results for the two earlier cohorts in particular are subject to bias due to mortality differences by educational levels.

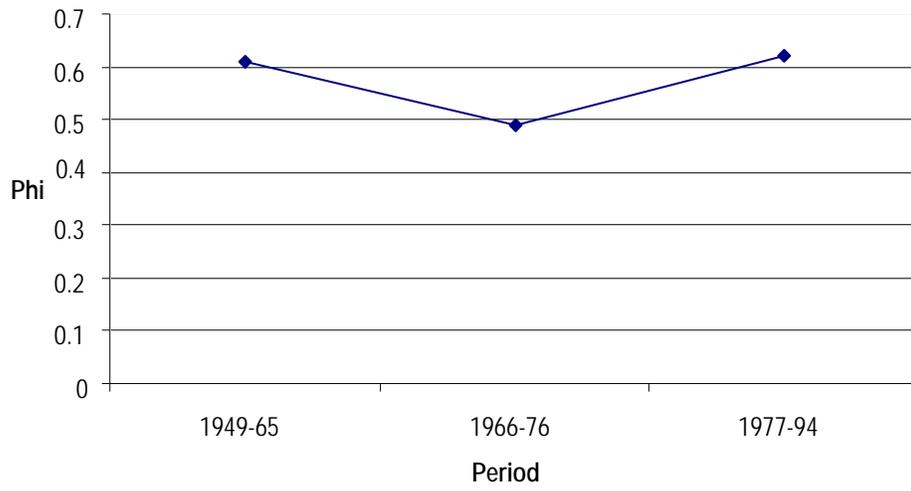
10. The result is calculated as $((148+47+17+73+93+30+51+69+65)*19)/((1+2+7)*(12+21+37))=16.10$.

11. Supplemental analysis calculates odds ratios along another two educational boundaries: junior high school and above versus no junior high school, senior high school and above versus no senior high school. The chances of marrying mates with junior high school and above are 6.83 times greater for men with junior high school and above for men with no junior high school before the Cultural Revolution, 5.74 times greater during, and 5.54 times greater after. The odds of marrying mates with senior high school and above are about 15.01 times higher for men with senior high school and above than for men with no senior high school before the Cultural Revolution, 6.04 times higher during, and 4.93 times higher after. These results imply that the educational assortative mating of the university educated were more subject to political intervention during the Cultural Revolution.

12. Supplemental analyses replicate three log-linear models used in previous studies (Schwartz and Mare 2005: the homogamy trend model; Smits et al. 2000: the

time-varying step parameter model; Xu et al. 2000: the log-linear crossing model). These analyses fail to find significant evidence for the variation of educational homogamy over three periods. Also by the BIC and AIC, none of these models fits the data better than Models 4 and 5. Results are available upon request.

Figure 1 The Strength of Educational Homogamy over Three Periods in Urban China



Note: The values of phi (ϕ) parameters come from Model 5 in Table 2.

Table 1 Cross-Tabulations of Husband's and Wife's Education, by period (N=3,250)

Husband's Education	Wife's Education														
	First marriage year 1949-65					First marriage year 1966-76					First marriage year 1977-94				
	(1)	(2)	(3)	(4)	Total	(1)	(2)	(3)	(4)	Total	(1)	(2)	(3)	(4)	Total
(1) ≤ primary	419	39	12	2	472	148	47	17	1	213	78	88	39	0	205
(2) Junior HS	104	37	10	1	152	73	93	30	2	198	115	376	204	9	704
(3) Senior HS	45	26	23	1	95	51	69	65	7	192	42	234	420	27	723
(4) ≥ University	5	7	20	8	40	12	21	37	19	89	2	30	68	67	167
Total	573	109	65	12	759	284	230	149	29	692	237	728	731	103	1,799

Table 2 Goodness-of-Fit Results for Models of Assortative Mating (N=3,250)

Model	<i>d.f.</i>	L ²	BIC	AIC	Δ	Period-Specific φ Parameters		
						1949-65	1966-76	1977-94
(1) WP, HP	27	914.74 ^a	696.41	860.74	19.48	--	--	--
(2) WP, HP, (WH) _x , M, constant φ over P	23	207.78 ^a	21.79	161.78	6.35	--	--	--
(3) WP, HP, (WH) _x , M, varying φ over P	21	204.89 ^a	35.08	162.89	6.20	.61	.52	.60
(4) Model 2+D	21	28.67 ^b	-141.14	-13.33	2.33	--	--	--
(5) Model 3+D	19	22.62 ^c	-131.02	-15.38	2.19	.61	.49	.62

Note: Model terms (number of parameters): W= wife's education (3); H= husband's education (3); P= period (2); M= main diagonal (4); D= distance from the main diagonal (2); subscript x represents log-multiplicative layer effect among tables; *d.f.*= degrees of freedom; L²=the log-likelihood ratio chi-square statistic; BIC= L²-(*d.f.*)ln(N); AIC=L²-2(*d.f.*); Δ represents the dissimilarity index between observed and predicted frequencies (in percent). All models are estimated using the LEM software package (Vermunt 1997).

^a p<.0001

^b p=.12

^c p=.25

REFERENCES

- Akaike, Hirotugu. 1974. "A New Look at the Statistical Model Identification." *IEEE Transactions on Automatic Control* AC-19:716-23.
- Beckett, Megan, Julie Da Vanzo, Narayan Sastry, Constantijn Panis, and Christine Peterson. 2001. "The Quality of Retrospective Data: An Examination of Long-Term Recall in a Developing Country." *The Journal of Human Resources* 36:593-625.
- Bernstein, Thomas P. 1977. *Up to the Mountains and Down to the Villages: The Transfer of Youth from Urban to Rural China*. New Haven, CT & London: Yale University Press.
- Croll, Elisabeth. 1981. *The Politics of Marriage in Contemporary China*. Cambridge: Cambridge University Press.
- . 1983. *Chinese Women since Mao*. New York: M.E. Sharpe Inc.
- . 1984. "Marriage Choice and Status Groups in Contemporary China." Pp. 175-197 in *Class and Social Stratification in Post-Revolution China*, edited by J. L. Watson. Cambridge: Cambridge University Press.
- Deng, Zhong and Donald J. Treiman. 1997. "The Impact of the Cultural Revolution on Trends in Educational Attainment in the People's Republic of China." *American Journal of Sociology* 103:391-428.
- Ganzeboom, Harry B. G., Donald J. Treiman, and Wout C. Ultee. 1991. "Comparative Intergenerational Stratification Research: Three Generations and Beyond." *Annual Review of Sociology* 17:277-302.

- Hannum, Emily. 1999. "Political Change and the Urban-Rural Gap in Basic Education in China: 1949-1990." *Comparative Education Review* 43:193-211.
- Hooper, Beverley. 1991. "Gender and Education." Pp. 352-374 in *Chinese Education: Problems, Policies, and Prospects*, edited by I. Epstein. New York and London: Garland Publishing.
- Huang, Lucy Jen. 1962. "Attitude of the Communist Chinese toward Inter-Class Marriage." *Marriage and Family Living* 24:389-92.
- Kerckhoff, Alan C. 1995. "Institutional Arrangements and Stratification Processes in Industrialized Societies." *Annual Review of Sociology* 15:323-47.
- Lavelly, William, Zhenyu Xiao, Bohua Li, and Ronald Freedman. 1990. "The Rise in Female Education in China: National and Regional Patterns." *China Quarterly* 121:61-93.
- Lillard, Lee and Linda J. Waite. 1990. "Panel Versus Retrospective Data on Marital Histories: Lessons from the PSID." *Individuals and Families in Transitions: Understanding Change through Longitudinal Data*, edited by H. V. Beaton, D. A. Ganni, and D. T. Frankel. Washington, DC: U. S. Bureau of the Census.
- Mayer, Karl Ulrich and Urs Schoepflin. 1989. "The State and the Life Course." *Annual Review of Sociology* 15:187-209.
- Ministry of Education of the People's Republic of China. 2005a. "Great Educational Events for Fifty Years (1949-1959)." Retrieved January 1, 2005 (<http://www.moe.edu.cn/edoas/website18/info4984.htm>).

Ministry of Education of the People's Republic of China. 2005b. "Big Educational Events for Fifty Years (1960-1969)." Retrieved 1 January, 2005

(<http://www.moe.edu.cn/edoas/website18/info4985.htm>).

Ministry of Education of the People's Republic of China. 2005c. "Big Educational Events for Fifty Years (1970-1979)." Retrieved 1 January, 2005

(<http://www.moe.edu.cn/edoas/website18/info4986.htm>).

Ministry of Education of the People's Republic of China. 2005d. "Big Educational Events for Fifty Years (1980-1989)." Retrieved 1 January, 2005

(<http://www.moe.edu.cn/edoas/website18/info4987.htm>).

Parish, William L. 1984. "Destratification in China." Pp. 84-120 in *Class and Social Stratification in Post-Revolution China*, edited by J. L. Watson. Cambridge: Cambridge University Press.

Platte, Erika. 1988. "Divorce Trends and Patterns in China: Past and Present." *Pacific Affairs* 61:428-45.

Powers, Daniel A. and Yu Xie. 2000. *Statistical Methods for Categorical Data Analysis*. New York: Academic Press.

Raftery, Adrian E. 1995. "Bayesian Model Selection in Social Research." *Sociological Methodology* 25:111-63.

Raymo, James M. and Yu Xie. 2000. "Temporal and Regional Variation in the Strength of Educational Homogamy." *American Sociological Review* 65:773-81.

Rosenfeld, Michael J. Forthcoming. "Racial, Educational, and Religious Endogamy in the

- United State: A Comparative Historical Perspective". *Social Forces*.
- Schwartz, Christine R. and Robert D. Mare. 2005. "Trends in Educational Assortative Marriage from 1940 to 2003". *Demography* 42:621-646.
- Smits, Jeroen. 2003. "Social Closure among the Higher Educated: Trends in Educational Homogamy in 55 Countries." *Social Science Research* 32:251-77.
- Smits, Jeroen, Wout C. Ultee, and Jan Lammers. 1998. "Educational Homogamy in 65 Countries: An Explanation of Differences in Openness Using Country-Level Explanatory Variables." *American Sociological Review* 63:264-85.
- . 2000. "More or Less Educational Homogamy? A Test of Different Versions of Modernization Theory Using Cross-Sectional Evidence for 60 Countries." *American Sociological Review* 65:781-88.
- Smits, Jeroen and Huynjoon Park. Forthcoming. "Five Decades of Educational Assortative Mating in Ten East Asian Societies." *Social Forces*.
- Unger, Jonathan. 1982. *Education under Mao: Class and Competition in Canton Schools, 1960-1980*. New York: Columbia University Press.
- Ultee, Wout C. and Ruud Luijkx. 1990. "Educational Heterogamy and Father-to-Son Occupational Mobility in 23 Industrial Nations: General Societal Openness or Compensatory Strategies of Reproduction." *European Sociological Review* 6:125-49.
- Vermunt, Jeroen K. 1997. *LEM 1.0: A general program for the analysis of categorical data*. Tilburg: Tilburg University.
- Walder, Andrew G. 1990. "Economic Reform and Income Distribution in Tianjin,

- 1976-1986." Pp.135-56 in *Chinese Society on the Eve of Tiananmen*, edited by D. Davis and E. F. Vogel. Cambridge, MA: Harvard University Press.
- Weakliem, David. 1999. "A Critique of the Bayesian Information Criterion for Model Selection." *Sociological Methods and Research* 27:359-97.
- Whyte, Martin King and William Parish. 1984. *Urban Life in Contemporary China*. Chicago: University of Chicago Press.
- Wu, Xiaogang and Donald J. Treiman. 2004. "The Household Registration System and Social Stratification in China: 1955-1996." *Demography* 41:363-84.
- Xie, Wen and Nan Lin. 1986. "The Process of Status Attainment in Urban China." Paper presented at *the Annual Meeting of American Sociological Association*, New York, NY.
- Xie, Yu. 1992. "The Log-Multiplicative Layer Effect Model for Comparing Mobility Tables." *American Sociological Review* 57:380-95.
- . 1998. "The Essential Tension between Parsimony and Accuracy." *Sociological Methodology* 28:231-36.
- Xu, Xiaohe, Jianjun Ji, and Yuk-Ying Tung. 2000. "Social and Political Assortative Mating in Urban China." *Journal of Family Issues* 21:47-77.
- Yang, C. K. 1959. *The Chinese Family in the Communist Revolution*. Cambridge, MA: MIT Press.
- Zhang, Junsen, Yaohui Zhao, Albert Park, Xiaoqing Song. 2005. "Economic Returns to Schooling in Urban China, 1988 to 2001." *Journal of Comparative Economics* 33:

730-52.

Zhao, Wei and Xueguang Zhou. 2002. "Institutional Changes and Returns to Education in Urban China: An Empirical Assessment." *Research in Social Stratification and Mobility* 19:337-73.

Zhou, Xueguang. 2000. "Economic Transformation and Income Inequality in Urban China: Evidence from Panel Data." *American Journal of Sociology* 105:1135-74.

Zhou, Xueguang and Liren Hou. 1999. "Children of the Cultural Revolution: The State and the Life Course in the People's Republic of China." *American Sociological Review* 64: 12-36.

Zhou, Xueguang, Phyllis Moen, and Nancy Brandon Tuma. 1998. "Educational Stratification in Urban China: 1949-94." *Sociology of Education* 71:199-222.

Zhou, Xueguang, Nancy Brandon Tuma, and Phyllis Moen. 1996. "Stratification Dynamics under State Socialism: The Case of Urban China, 1949-1993." *Social Forces* 74:759-96.