On the changing structure of social networks in urban China [1]

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Abstract

This study is a replication of a survey on personal networks conducted 7 years earlier in Tianjin, China. Comparing the results of the two surveys reveals a large amount of change. Tianjin residents now report having more ties to friends and to associates beyond work and family, and fewer workplace ties and far fewer family ties. Women have gained on men in the number of friends, and young people have fewer workplace ties. These changes at the micro-level are examined in the light of changes in the Chinese macro-social structure.

1. On the changing structure of social networks in urban China

The study reported here is a 1993 replication of a survey conducted in 1986 in the city of Tianjin, China. In both cases, individuals were asked to name others to whom they had personal ties. Although different respondents were interviewed in each survey, the use of the same name generator allows us to see how personal networks have changed in Tianjin over 7 years.

Comparing the results of the 1986 survey with those of 1993 reveals that a good deal of change has occurred. Indeed, the patterning of interpersonal relationships in Tianjin

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seems to have shifted dramatically in only 7 years. In the present report we will describe those shifts.

But we will go beyond these descriptions and speculate about some of the possible bases for the specific changes that we have observed. In particular, we will try to make sense of any observed changes in interpersonal linkages in the light of what we know about recent alterations in the broad structure of Chinese society. Hopefully, our speculations will provide insights that can be used as guides in the development of hypotheses for future research. In the present analysis they are not intended to be conclusive; they are simply exploratory.

2. The 1986 Tianjin survey [2]

The city of Tianjin is located about 100 miles south-east of the Chinese capital, Beijing. As the third largest city in the country, after Shanghai and Beijing, it is an industrial and trading center. There are about four million residents living in the city, and another four million living in the four suburbs and five nearby rural counties (Duan et al., 1987).

Tianjin is administered on three levels: districts, wards, and residents' committees; the last one is the neighborhood organization through which the government controls urban residents' life at home and those who do not belong to any organization, e.g. school or workplace. There are nine districts, 124 wards, and about 2000 residents' committees in the urban area of the city (Duan et al., 1987). Respondents were randomly chosen from a sample of Tianjin households in the third annual survey, organized by the Tianjin city government and the Tianjin Academy of Social Sciences.

First a purposive sample of 36 wards was selected in a way that assured a balance of neighborhood types representing the city as a whole. It included commercial, administrative, industrial, housing projects, and waterfront areas. Within each selected ward, one residents' committee was randomly chosen. Next, all the households in the selected residents' committee, were classified according to the occupation of the head of the household. This classification was based on the seven occupational categories used in the 1982 census.

From each occupational category, a number of households were selected randomly, proportional to the frequency of that occupation in Tianjin in the 1982 census. Finally, in every household selected, the family member chosen for interview was the one who was 18 or older, employed or retired, and whose date of birth was closest to October 1. The total number of respondents was 1011.

The survey included a section on personal networks adapted by Danching Ruan from the American General Social Survey (GSS) of 1985 (Burt, 1984, Burt, 1985). Ruan introduced minor revisions in the wording of questions in order to adapt the instrument to Chinese conditions.
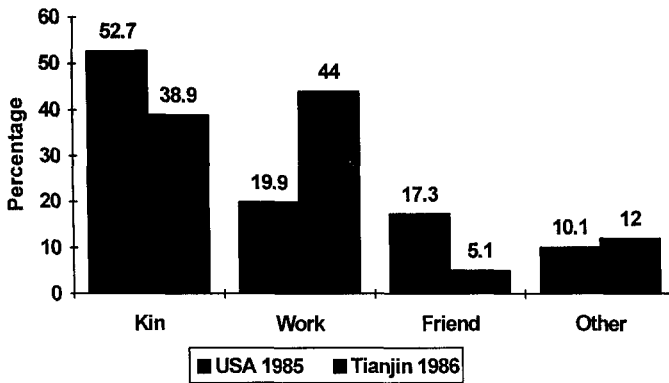
Fig. 1. Types of relations in a typical network: US–China comparison.

The principal network question in the 1986 study was nearly identical to that used in the GSS:

> From time to time, most people discuss important matters with other people. Looking back over the last six months, with whom have you discussed important matters? [3]

Following the GSS, after respondents gave the names of people with whom they had discussed important matters, they were asked other questions about the first five persons mentioned. Respondents were asked to report the sex, age, education, occupation, and party membership of each of these other persons and they were asked to characterize their own relationship with each.

Ruan (1993) compared the results of the 1986 Tianjin study with those of the 1985 GSS. The comparisons revealed marked differences in the patterning of reported social linkages between the two countries. As expected, family ties were important in the composition of individual's social linkages in both countries. When a respondent in Tianjin discussed an important matter with someone, there was about a 40% chance that he or she would turn to a relative. Contrary to the common expectation, the tendency to discuss important matters with relatives was stronger in America than in Tianjin (53% vs. 39% in Tianjin).

Respondents from the two countries differed also in their tendency to report fellow workers and friends as sources of social linkages. In fact, the Chinese proportion of reported workplace ties was double that of the Americans, and the American proportion of reported ties with friends was double that of the Chinese. [4]

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[3] This wording in the Chinese survey was slightly different from that used in the GSS. The last phrase in the GSS question was "... who are the people with whom you discussed matters important to you?", whereas the corresponding phrase in the Tianjin survey was "... with whom did you discuss important matters (Ni yu shui taolun guo zhongyao wenti)?".

[4] The term 'friend' in this paper refers to others with whom the respondent reports no other type of relationship. The results of analyses do not change significantly when friend-alters who are also related to the ego in other ways (e.g. co-worker) are included.

The overall picture shown in Fig. 1 indicates that the typical American discussion network was almost completely dominated by three kinds of linkages: kin (53%), fellow workers (20%), and friends (17%). In contrast, the typical Chinese discussion network was dominated by only two kinds of linkages: family and co-workers (39% and 44%, respectively); ties based on friendship were minor; they composed only 5% of the ties.

3. The 1993 Tianjin survey

The 1993 survey was also conducted in Tianjin. [5] This time three wards were randomly chosen from each of the six metropolitan districts and two from each of the three waterfront districts. Within each selected ward, one residents' committee was randomly chosen. Then from each residents' committee, 45–50 households were chosen at random from the household register kept by the residents' committee. The respondent was the member in the chosen household who was 18 or older at the time of the survey and whose date of birth was closest to March 1. The survey involved a range of network items, including those questions that had been derived from the GSS and used in the 1986 Tianjin survey. In all, there were 1080 respondents who answered these questions. To make the data comparable with those of the 1986 survey, only employed respondents are included in the present analysis.

The 1993 sample is quite representative of the Tianjin population. The statistical figures based on the 1993 sample, such as gender ratio, average housing space, and mean wage, fit reasonably well with the official figures for Tianjin and urban China in 1993. The 1993 sample is also comparable with the 1986 sample. The two samples display the same distributions of ages and gender ratios. But the 1993 respondents are better educated than those in the 1986 sample, and more reported working in the sector under state ownership. Comparing the occupational distributions, there are slightly fewer industrial workers in the 1993 sample, and more of the 1993 respondents belonged to the professional and technical personnel category and the category of clerical workers and office staff. Although these differences between the two samples are not large enough to cause serious concern, we will take these factors into consideration when examining differences between the networks from the two samples.

4. Comparative analysis

To begin with, there was a significant decline in the overall number of names of discussion partners that respondents provided. The mean decreased from 4.58 names in 1986 to 3.39 in 1993 ($F = 411.5$, df $= 1$, 1967, $P = 0.0000$). [6]

[6] In view of the relatively large sizes of the samples in these surveys, alpha has been set at 0.01 for all of the statistical tests here.

Table 1
Average number of kin in discussion network by year

1986	1.75
1993	0.69
$F = 342.21$, df = 1, 1901, $P = 0.000$	

In order to uncover the details of this decline, we will want to compare the results of the two surveys both in terms of differences in the kinds of relationships that link respondents to the others they name and differences in the characteristics of the respondents themselves.

We categorized relationships into four classes: (1) those based on kinship, (2) those based in the workplace, (3) those embodying friendship, and (4) 'others' (not spouses, or other kin, co-workers, or friends, these ties were mainly with former classmates and neighbors). The categories friend and 'other' do not overlap with other categories. Overlap between kin and co-worker is very rare in both 1986 and 1993 surveys, and is eliminated in our analyses; if a co-worker is also a relative, he/she is coded as a relative.

We recorded five characteristics of respondents: (1) sex (male/female), (2) age (18–29/30–39/40–49/50–59/60–88), (3) party affiliation (Communist Party member/non-member), (4) education (none/elementary school/junior middle school/high school (including technical high school)/associate degree/college degree or higher), and (5) sector of employment (state ownership/other).

Preliminary analyses showed that there were no significant differences in respondents' tendencies to name fewer or more kin, co-workers, friends, or others according to either differences in education or differences in sector of employment. These two respondent characteristics, therefore, were not used in subsequent analyses. [7]

Table 1 shows the changes in the tendency to name kin as discussion partners in 1986 and 1993. The overall difference was significant and, as Table 2 shows, everyone (regardless of sex, age, or party affiliation) named fewer relatives in 1993. The amount of reduction was about the same for everyone, and further analysis showed that every kind of kin-based tie declined – spouses, parents, siblings, children, and other relatives.

Women named kin significantly more often than did men, both in 1986 and in 1993. No age group showed any significant tendency to mention either more or fewer kin than any other in 1986 or in 1993. And party members showed a slight but non-significant tendency to mention fewer kin-links than non-members in 1986 and again in 1993.

Table 3 shows the changes in the tendency to name co-workers in 1986 and in 1993. Table 4 reveals the effects of the respondents' characteristics on the tendency to name co-workers as discussion partners in both years. And, as did Tables 1 and 2, Tables 3 and 4 display a consistent pattern – regardless of sex, age, or party membership, there is a fairly uniform decline in the overall tendency to name co-workers.

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[7] We have also compared people who lived in the workplace housing in 1986 and 1993 with people who lived in other types of housing, and we did not find the former differ significantly in the number and kinds of ties from others.

Table 2
Average number of kin in discussion network by sex, age, and party membership in 1986 and 1993

| | Year | |
	1986	1993
Sex		
Female	1.98	0.82
Male	1.56	0.59
	$F = 23.17$, df $= 1$, 1000, $P = 0.000$	$F = 11.32$, df $= 1$, 899, $P = 0.001$
Age		
18–29	1.44	0.70
30–39	1.79	0.70
40–49	1.86	0.67
50–59	1.90	0.70
60 +	1.73	0.69
	$F = 3.27$, df $= 4$, 997, $P = 0.011$	$F = 0.03$, df $= 4$, 892, $P = 0.998$
Party membership		
Member	1.54	0.54
Non-member	1.79	0.73
	$F = 4.11$, df $= 1$, 1000, $P = 0.043$	$F = 5.24$, df $= 1$, 899, $P = 0.022$

Table 3
Average number of co-workers in discussion network by year

1986	2.06
1993	1.67
$F = 26.36$, df $= 1$, 1901, $P = 0.000$	

Table 4
Average number of co-workers in discussion network by sex, age, and party membership in 1986 and 1993

| | Year | |
	1986	1993
Sex		
Female	1.92	1.52
Male	2.18	1.79
	$F = 7.37$, df $= 1$, 1000, $P = 0.007$	$F = 5.58$, df $= 1$, 899, $P = 0.018$
Age		
18–29	1.92	0.99
30–39	2.18	1.89
40–49	2.12	2.08
50–59	1.91	1.80
60 +	1.86	1.49
	$F = 1.48$, df $= 4$, 997, $P = 0.207$	$F = 13.29$, df $= 4$, 892, $P = 0.000$
Party membership		
Member	2.52	2.27
Non-member	1.98	1.50
	$F = 16.15$, df $= 1$, 1000, $P = 0.000$	$F = 33.31$, df $= 1$, 899, $P = 0.000$

Table 5
Average number of friends in discussion network by year

1986	0.25
1993	0.54
$F = 53.22$, df $= 1, 1901$, $P = 0.000$	

This reduction in ties to co-workers may appear to be more dramatic than it is. Since ties in the workplace declined at the same rate as the overall number of ties, the proportion of workplace ties remained constant (44%) over the 7 years. In fact, many respondents in the 1993 survey did not mention any workplace ties at all (the percentage of respondents who mentioned at least one workplace tie dropped from 80% to 62%), but those respondents in the 1993 survey who did mention workplace ties, mentioned more of them (the mean number in 1986 was 2.6 and in 1993 it was 2.7).

In 1986, women showed a tendency to name significantly fewer co-workers than did men, and in 1993 the same tendency was exhibited, but it was no longer large enough to be significant. In terms of age, the very youngest and the very oldest respondents mention fewer co-workers both years. But, while this pattern was not significant in 1986, by 1993 it achieved significance. The difference, it seems, results from the fact that the 18–29 age group shows a noticeably larger decline from 1986 to 1993 than any other age group. [8] For example, in 1986, 80% of the respondents in the 18–29 age group mentioned at least one co-worker, but in 1993 only 45% of them did so. Party members in both 1986 and 1993 were more likely to name co-workers as discussion partners.

Table 5 reports respondents' tendencies to identify discussion partners as friends in 1986 and 1993. It tells a very different story. Despite the overall decline in naming others as discussion partners, the tendency to name friends grew between 1986 to 1993. Moreover, as Table 6 shows, it has grown among both sexes, all age groups, and both members and non-members of the Communist Party.

Men named significantly more friends than women in 1986, but, by 1993, the dominance of men in this respect had almost evaporated. The youngest respondents reported more friends than any other age group in 1986, and, as everyone reported more friends in 1993, the younger people continued to dominate in this respect. And, in 1986, party members reported slightly, but certainly not significantly fewer friends than non-members. Though non-members reported an increased number of friends as compared with party members in 1993, that difference still did not achieve significance.

Finally, Table 7 shows how respondents assigned discussion partners to the 'others' category in 1986 and 1993. Like the category of friends the category 'others' grew significantly during the period in question.

Changes in the tendency to categorize discussion partners as 'others' in terms of respondents' characteristics are shown in Table 8. In 1986 males named 'others' more

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[8] The two-way analysis of number of co-workers named by age and year is the only significant two-way analysis in this data set; it yields a $F = 4.90$, df $= 4, 1889$, $P = 0.000$.

Table 6
Average number of friends in discussion network by sex, age and party membership in 1986 and 1993

	Year	
	1986	1993
Sex		
Female	0.18	0.51
Male	0.30	0.56
	$F = 10.49$, df = 1, 1000, $P = 0.001$	$F = 0.67$, df = 1, 899, $P = 0.413$
Age		
18–29	0.39	0.84
30–39	0.19	0.47
40–49	0.21	0.49
50–59	0.26	0.35
60+	0.23	0.44
	$F = 4.04$, df = 4, 997, $P = 0.003$	$F = 5.77$, df = 4, 892, $P = 0.000$
Party membership		
Member	0.23	0.41
Non-member	0.25	0.58
	$F = 0.14$, df = 1, 1000, $P = 0.712$	$F = 3.85$, df = 1, 899, $P = 0.050$

than females, but the difference was not significant. And by 1993, that small difference had all but disappeared. In 1986, the youngest age class named almost twice as many 'others' as any other age category, and as the tendency to name 'others' grew in 1993, that difference was maintained. Unlike the growth in naming friends, however, the growth in naming others was not uniform; respondents aged 40–49 actually reported fewer 'others' in their 1993 discussion networks. In 1986 non-party members reported slightly more ties to 'others' than did party members. And by 1993, the number of 'others' that non-members reported had grown considerably, while the number reported by party members had hardly increased at all.

Thus, the typical pattern of personal connections in Tianjin has shifted. In 1993 it was no longer completely dominated by ties to co-workers and family members as it was in 1986. The new structure now includes three major kinds of linkages: those with co-workers (44%), those with family (22%), and those with friends and others (34%).

Overall, then, there were six noteworthy changes in personal networks in Tianjin between 1986 and 1993. (1) There was a reduction in the average number of names respondents provided in 1993. Specifically, (2) fewer co-workers were included, and (3)

Table 7
Average number of others in discussion network by year

1986	0.56
1993	0.70
$F = 8.68$, df = 1, 1901, $P = 0.003$	

Table 8
Average number of others in discussion network by sex, age, and party membership in 1986 and 1993

	Year	
	1986	1993
Sex		
Female	0.51	0.70
Male	0.61	0.71
	$F = 2.98$, df = 1, 1000, $P = 0.084$	$F = 0.00$, df = 1, 899, $P = 0.958$
Age		
18–29	0.95	1.24
30–39	0.47	0.55
40–49	0.43	0.36
50–59	0.49	0.67
60 +	0.52	0.75
	$F = 11.05$, df = 4, 997, $P = 0.000$	$F = 18.27$, df = 4, 892, $P = 0.000$
Party membership		
Member	0.46	0.48
Non-member	0.58	0.77
	$F = 2.22$, df = 1, 1000, $P = 0.137$	$F = 10.25$, df = 1, 899, $P = 0.001$

far fewer relatives. Countering that trend, respondents mentioned more 'others' (primarily former school mates and people from the same home town), and (4) far more people named were classified as friends. In addition, (5) women gained on men in naming friends. And, finally, (6) the oldest and the youngest respondents, who named relatively few co-workers in 1986, named even fewer in 1993.

How can we explain these dramatic changes occurring in only 7 years? In the next section, we will examine some ways in which these changes might be understood in the light of other changes that have recently occurred in China.

5. Discussion

In her comparison of 1986 Tianjin network data with the American data, Ruan (1993, pp. 81–96) adopted the traditional sociological perspective that attempts to understand micro-level interaction patterns in terms of constraints imposed by macro-structures (Durkheim, 1938; Homans, 1950; Simmel, 1950, Simmel, 1955; Blau, 1977; Wellman, 1979; Feld, 1981, Feld, 1982; Fischer, 1982; Blau and Schwartz, 1984; Blum, 1985; Howard, 1988; Marsden, 1990; Webster et al., 1996). She reasoned that the differences between personal networks in the US and China grew out of macro-structural differences in the two societies.

She argued that, for more than 30 years, workplaces in China had played a much more important role in people's lives than they do in the US (Whyte and Parish, 1984; Walder, 1986; Lu, 1989). She indicated that since so many basic necessities in people's daily life were provided by the workplace, most important matters for Chinese were

directly linked to the workplace. Besides salary, a Chinese workplace typically provided its workers with goods, services, and other material and social advantages such as medical care, housing, loans, child care, and pensions. Many of these benefits, including housing, schools, and services, extended also to the workers' families. It was true also that the distribution of goods and services by the workplace was usually under the control of workshop leaders and other officials. In short, not only did Chinese workers depend on their workplace to satisfy their needs, they depended specifically on influential people at work to obtain needed goods and services.

Indeed, because there were hardly any alternatives, the ability of a given workplace to provide benefits and assistance largely determined the living standard of its workers. If one's needs were not satisfied within the workplace, kin provided the only alternative. The resources of most kin, however, were usually very limited. In addition, there was very little mobility. Individuals were usually restricted to some particular workplace, their first and life-time job (Whyte and Parish, 1984; Walder, 1986; Davis, 1990). Thus, Ruan attributed the strong presence of ties to co-workers in the Chinese personal networks to the central role played by the workplace in urban China. Kinship ties were important, she pointed out, but unlike workplaces, families were simply not in a position to provide needed resources.

Since late 1970s, when the Economic Reform started in China, fundamental alterations have occurred at the macro-level of Chinese social structure. It would be reasonable, then, to use the structuralist model again and seek to understand the changes in personal networks in terms of the changing macro-structure.

Although economic reform started around 1979, it was not until after the mid-1980s that fundamental social changes really began in urban China. By the mid-1980s it was clear that the Economic Reform had not improved the economy of the state-sector as the government hoped. In 1993, only one-third of state-sector enterprises made any profit at all (Chian, 1994, p. 35). Indeed, many state-sector enterprises are currently almost bankrupt; they cannot pay full salary to their workers. Even in places where people still receive their regular salary, life has become difficult because of inflation. Job security is no longer a reality for many people. Just as in the private sector, the state and collective sectors now can and do lay workers off (Bian et al., 1994). As reported in *The Statistical Yearbook of Tianjin*, about 10% of a randomly selected sample of families in Tianjin in 1992 had at least one family member who was taking a 'long vacation' (Tianjin Statistical Bureau, 1993, p. 23). Many work units have also established a contract system where people are hired or paid by contract and when the contract expires, the work unit may or may not renew it. In short, Chinese urban workers have lost their life-long job security, which, until recently, was guaranteed by the government.

There is, however, now a new option – the market economy. In 1992, the official figure for proportion of private sector workers in the Chinese urban labor force was still only 5.36% (State Statistical Bureau of China, 1993, p. 97), but the actual number of people working in the market economy today is much larger. Many state and collective sector enterprises and agencies have also entered the market by establishing joint ventures with private or foreign companies. Included in this new economy are a housing market, where people can buy an apartment or trade their current apartment with others; a stock market where people can invest; an employment market, where people can find

new jobs, a service market where people can hire help, and most important, a private sector, where people can go into business.

In recent years, millions of peasants have moved into cities. Within cities, some people have quit or taken leave from their state jobs to join the private sector. Those who have been laid off are often working as street vendors or taxi drivers. In order to avoid a decline of living standard brought about by inflation, many people have taken second jobs. How much occupational mobility has occurred among city people is still a question being studied (Davis, 1990; Sun et al., 1994; Zhou et al., 1994), but the basic fact is that it is now much easier to change jobs or move from one place to another than it has been in the past.

In addition, there has emerged a service industry that is independent of both the government and the traditional workplace. There are more restaurants, more night clubs, and more amusement parks. There are information centers (mainly offering business information) and agencies that facilitate job hunting. There are schools that teach typing or computer use, and college-level night classes that lead to an associate degree. Voluntary organizations have also emerged. There are now middle school and university alumni associations, hometown associations, and professional associations (Whyte, 1993; Wang et al., 1993). The government permits these kinds of social organizations to exist, as long as they display no obvious political elements. In short, the Economic Reform has not only created a new economic structure, but also a new social dimension in the Chinese society.

In sum, two major changes have occurred at the macro-level: the role of workplace in people's lives has diminished and new opportunities have been provided by the emerging market economy. The problem, then, is to determine what, if any, effects these changes in the structure of Chinese urban life have had on people's patterns of personal connections.

We will begin by considering the abrupt drop in the total number of names given by respondents. The GSS question (the one used in both surveys in Tianjin) asks specifically about others with whom an individual discusses 'important matters.' Since it is probably safe to assume that individuals seldom discuss important things with relative strangers, the question, then, is recording only what Granovetter (1973) called 'strong ties.' What we have found, then, is a reduction in the reported number of strong ties.

Given the pivotal role of the workplace for the past 30 years, one would suspect that a great many of most people's ties have been strong ones. The same collection of individuals worked together, lived in close proximity and spent much of their leisure time together. But recently, as the dominance of the workplace has eroded, people are no longer connected to the same relatively small, stable collection of others. Indeed, as job security diminishes and as more and more people move around, both socially and spatially, maintaining regular contact with a small set of others with whom ties are 'strong' is probably increasingly difficult. Now, in order to meet their day to day needs, and to access some of the newly available services and opportunities, individuals have to move out of the workplace, and establish new social contacts in new settings. To facilitate access to the new, more segmented, social milieu, they need to establish more 'weak ties.' But since we questioned them only about their strong ties, we should not be surprised that in 1993 they are able to provide fewer names than they did in 1986.

Next, we will consider the question of workplace ties. They have been reduced, but their reduction is relatively small compared with the reduction in kin-based ties. Ties with co-workers still seem to play an important role.

Given the new opportunities and the insecure position of many traditional enterprises, one wonders why workplace ties have been maintained. One obvious reason is that the workplace is still very important to a great many people. The fact is that workplaces still provide some benefits and assistance, and many of them still provide more security than private business. This is why, among some couples, one spouse will join the private sector and the other will stay in the traditional workplace in order to keep enjoying the benefits, like housing and pension, and some security, of belonging to a work unit.

In addition, some people participate in the market economy through their workplace. With an official, workplace-based organization, one gets financial backup and credits to start a company or joint venture, and one will not lose personally if the business does not go well. To do this, however, one needs to be relatively well established in the workplace. This may be one reason that the middle age groups still maintain a good many ties to the workplace.

Overall, then, while some parts of the Chinese macro-structure has changed dramatically, some parts remain unchanged. The nature and the role of the traditional workplace have only partially changed and so has the importance of workplace ties in personal networks. Again, the changes (and the non-changes) in the micro-social structure we have observed in our study seem consistent with the changes (and the non-changes) in the macro-social structure.

The fact that the old people and the young people have changed the most in dropping workplace ties provides supporting evidence here. In comparison to the middle-aged groups, these two groups are much less attached to their workplace. In a diminishing workplace-based economy, many older workers have been retired or are about to retire. As to the younger people, they already know that their future in their current workplace is very unstable, and a possible future in the new market economy is a very reasonable alternative to explore. Workplace and workplace ties are, therefore, less important to these two groups of people.

Now we come to the kinship ties. The significant decrease in kinship ties in the Chinese personal networks seems to indicate the declining importance of the Chinese urban family in the reform era, but another possibility might simply be that the ties beyond family and work have become much more important and much easier to establish than before. Since time and energy for social association are not unlimited and workplace ties remain important to a lot of people, the increases in the ties beyond family and work would automatically cause a drop in kinship ties.

There has always been concern among China scholars about the decline of family in China under the communist rule, but Davis and Harrell (1993, p. 1) points out that the government has created a paradoxical environment for the Chinese families since 1949. On the one hand, it ''undercut the power and authority of patriarchs and destroyed the economic logic of family farms and businesses. On the other hand, it created demographic and material conditions conducive to large, multi-generational households with extensive economic and social ties to nearby kin.''

For example, the governmental restriction on residential and occupational mobility

have, until quite recently, made generations of family members reside in close proximity. The lack of market alternatives for a lot of services have made mutual help among family members indispensable. After the Economic Reform, however, both spatial mobility and increased opportunities may have weakened these last conditions that helped to maintain family cohesion.

Indeed, the market economy provides better goods and services, which would reduce people's dependency on their relatives as well as on their workplace. The decline of the workplace provision of benefits and assistance may have also weakened the ability of relatives to help. In the past, relatives were able to help (especially parents helping their adult children) because of the support they received from their workplace. Some parents, for example, used to be able to help their children to get a job at their own workplace. Today, many workplaces have stopped this practice.

Moreover, in recent years, many apartment buildings have been built and more young couples are able to establish their own households (Davis, 1993; Unger, 1993). This implies more physical distance among close kin, but this does not necessarily mean that there is less interaction among kin. Some studies show that kin have frequent contacts with one another through the family network, i.e. the network of several separate households of kin, and that Chinese urban families have not abandoned extended-family arrangement. Although most people prefer a nuclear household, their decision on co-residence with other family members depend on factors like housing conditions or the age and health condition of the elderly parents (Davis, 1993; Unger, 1993; Pan and Liu, 1994).

Next, we will consider the marked increase in the tendency to name friends and 'others' – to name individuals who are neither co-workers nor relatives. Given the rapid development in the market economy and the deteriorating situation in the state sector enterprises, one possible reason for the observed increase in ties to others who are neither co-workers nor relatives was suggested earlier. People may be making a self-conscious effort to extend their social contacts beyond their workplace and kin group. They may do so in order to take advantage of the new economic opportunities, or they may want to branch out because they feel threatened by the suddenly uncertain future. Associating with others who are neither kin nor co-workers might grow out of attempts to establish business contacts or mutual help associations. Gallin and Gallin's findings (Gallin and Gallin, 1985) on the changes in kinship ties in rural Taiwan lends some support to this idea. They found that as Taiwan's economy modernized, patrilineal kin (who tended to be located only in one's village) became less important than before and people turned to a wider network of affinal kin (kin by marriage), who tended to be spread out more widely in space.

In addition, under the Economic Reform, there is a new kind of social opportunity space. There are simply more places to go and more things to do after work, and consequently, there are more opportunities for everyone to meet people and to establish ties beyond their workplace and family. Thus, the increase in ties outside of work and family may be no more than a reflection of the increase in people's chances of making contact with others who are neither kin nor co-workers.

Finally, the fact that women have gained in friendship ties may also be consistent with what is going on at the macro-level. The Economic Reform has affected working

women in a negative way. The emerging view is that the profit (or the survival) of a workplace is more important than any principles of gender equality. Currently, therefore, women are facing more difficulties in terms of employment opportunities and career advancement. In fact, in many places, women have recently been laid off (Pan and Liu, 1994). This would have been unthinkable 15 years ago. It is reasonable to suspect, then, that at least some of these women have dealt with this threat by developing 'friendships' beyond the workplace and kinship in order to explore alternatives to the traditional workplace.

6. Conclusion

In the present paper, we have explored changes in the interaction patterns of individuals. We have attempted to understand these changes by viewing them in the context of changes in the broad structural properties of the larger society. Specifically, we have examined changes in the reported ties in people's personal networks in contemporary China and speculated about their connection to changes in the macro-social conditions in that country.

Macro- and micro-changes in contemporary China appear to be consistent with each other. Their consistency suggests that a structural process may be linking them. Thus, it is reasonable to suspect that the particular characteristics of contemporary Chinese personal networks may have emerged in response to the ways that Chinese urban society has been recently reorganized under the communist government.

Since the Chinese macro-social structure is still in transition, one would expect the Chinese micro-social structure to continue changing. In fact, changes in the micro-social structure may, in turn, have an impact on the macro-social structure. The new network pattern with increasing numbers of social ties that are independent of the workplace suggests increasing individual freedom. After all, it was through the workplace that the Chinese government has controlled its citizens quite effectively for decades. In a sense, then, the new pattern of ties that are not grounded in the workplace undermines the foundation of a totalitarian government, and it may be an early step towards a democratic society.

These, then, are our 'conclusions.' It must be remembered though that the macro-micro links proposed here are hypothetical. We hope that they can be used to develop hypotheses that can guide future research.

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