# Half-Life of History: Institutional Legacies and the Membership Base of the Chinese Communist Party CCP

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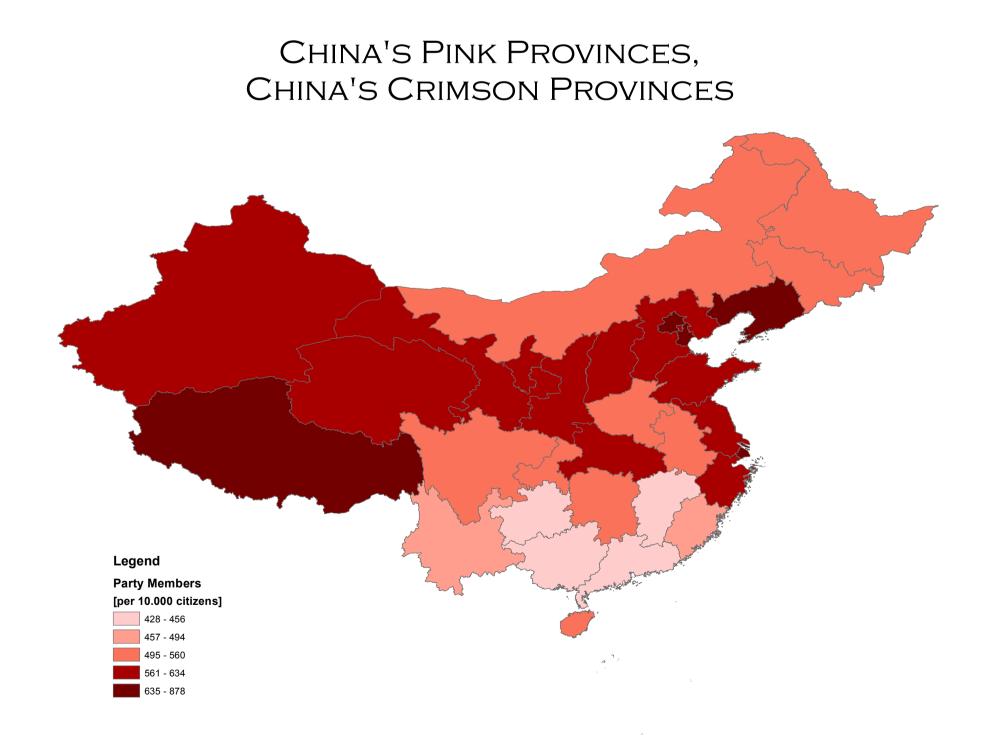
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Abstract: Do institutional legacies survive episodes of political upheaval? Do legacies withstand creeping erosion over long stretches of political calm? (Thelen, 2004) To shed new light on these fundamental questions about institutional change, my paper investigates the regionally uneven power base of the CCP, which continues to carry the imprint of military events 1937 to 1949. Following the call for better methodological tools to study political institutions in time(Pierson, 2004), my paper formulates a model of party growth, builds on economic approaches (Barro and Sala-i Martin, 1992) to test dynamic characteristics of this model, and estimates the rate of convergence in party membership, away from initial historical patterns.

## What explains local CCP strength? War Legacies!

The hold of the party is highly uneven throughout China, as reflected by membership statistics. Under Communist rule, China may not have red states and blue states, but it has devoutly Communist crimson provinces and less party-penetrated pink provinces.



When the CCP took over in 1949, contingencies of the Sino-Japanese War (1937-1945) and the Civil War (1945-1949) had left the party in a strong position in some parts of China and in a tenuous position in other parts. Initial party strength just after the communist takeover continues to leave its traces on party strength today. Statistical significance: 5%.

Table 1: Dependent variable: party members 2010 [per pop., log] explanatory variables coefficients

| 0001110101110 |
|---------------|
| +0.20*        |
| -0.10         |
| +0.02         |
| +0.12*        |
|               |

### **Toward a Dynamic View: Party Growth Model**

The regression analysis shows that party membership patterns today are associated with membership patterns in 1956. But the regression says nothing about dynamic trends. I will test the hypothesis that the effect of history is decaying over time. In this view, the weakly significant result in table 1 indicates that the legacy has already become less noticeable today.

## • Step 1: Basic Party Growth Model

Consider a jurisdiction at time t with  $M_t$  party members. The number of new party members is a function of the number of existing members  $F(M_t)$ . Assume that in each period a constant fraction x of the membership dies, is purged or otherwise exits the party. The growth dynamics can be written

$$\frac{\nabla M_t}{\nabla t} = F(M_t) - xM_t \tag{1}$$

Equation 1 is identical to a classical economic growth model with convergence. Thus, I follow macroeconomists in their treatment of the problem (Barro and Sala-i Martin, 1992). With additional assumptions, which are reasonable both for accumulation processes of economic capital and of political capital (in the form of party members), one yields

$$\dot{m} = ae^{m(b-1)} - (x+n)$$
 (2)

where m = ln(M/P), P is population, n is its growth.

# Step 2: Solving the Differential Equation for Empirical Analysis

It is impossible to empirically estimate the coefficients a and b of equation 2, since the marginal change of party membership  $\dot{m}$  is a mathematical construct, not directly observable in reality. Instead, thanks to a standard procedure using Taylor series, I transform the problem, such that party appears as a function of time. (de la Fuente, 2000)

$$m(t) = e^{-\lambda t} m(0) + (1 - e^{-\lambda t}) m^*$$
 (3)

Log party membership at time t is the weighted average of initial membership and membership in the steady state m\*.  $\lambda$  is the

speed of convergence. To allow for conditional convergence, the empirical specification includes controls c.

$$m_{t,i} = e^{-\lambda(t-1956)} m_{1956,i} + (1 - e^{-\lambda(t-1956)}) m^* + \beta c + \epsilon_i, t$$
 (4)

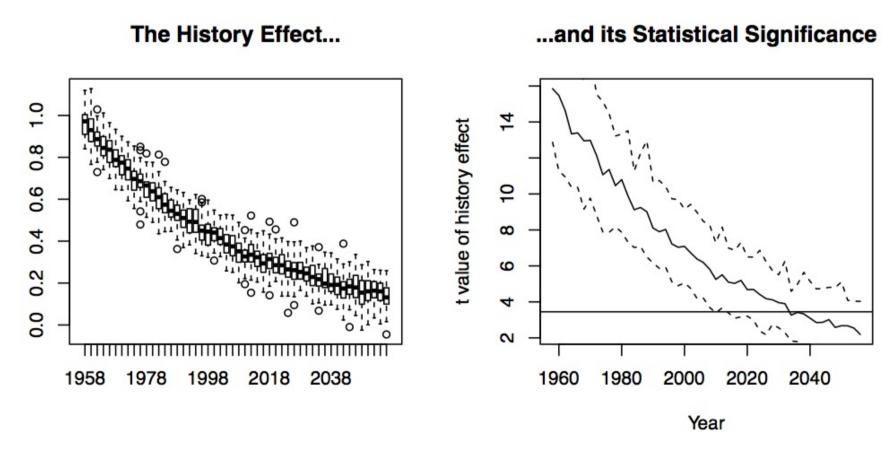
#### Historical Legacies Decay Only Slowly.

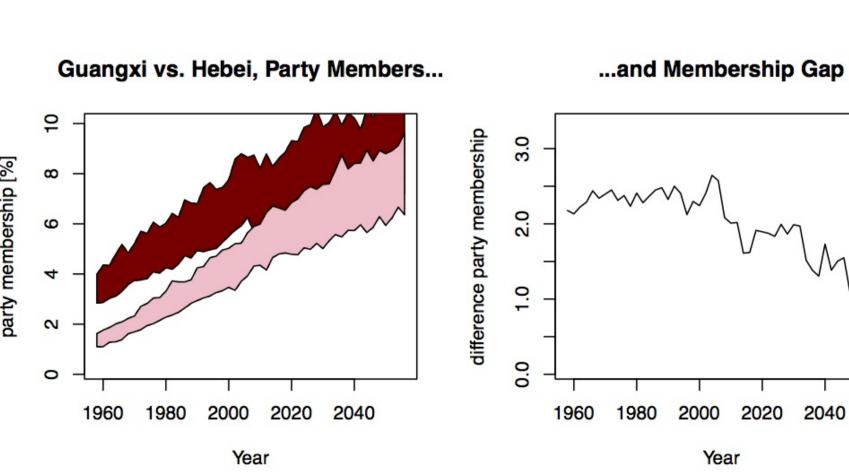
# CCP Membership Patterns Converge

Fitting equation 3 with data from 1956 to 2010, we find that convergence between provincial membership patterns is positive and highly significant at 0.1%. In the steady state 11% of the population of each province will be CCP members.

## Simulating 50 Historical Pathways

To illustrate the model, we simulate 50 alternative realizations of history between 1956 and 2056. Along the way, every two years, political scientists test whether party membership patterns are still correlated to party membership patterns in 1956. If the model is correct, from the year 2000 onward, an increasing number of political scientists would reject the hypothesis that contemporary party membership is associated with party membership in 1956.





Convergence is highly statistically significant, but it is slow. Only after 86 years, that is in 2042, will the difference in the membership of Guangxi (a typical pink state) and Hebei (a typical crimson state) be cut in half.

#### **Implications**

## Fastest convergence during transition to the post-Mao era

By estimating rates of convergence for different time periods, I identify the eras where the party was most quickly moving away from its traditional power bases.

| Table 2: Times of Breaking Away from Historical Patterns |           |                  |
|--|-----------|------------------|
| Characteristic Event                                     | Period    | Convergence Rate |
| Great Leap Forward/Famine                                | 1956-1965 | 0.06***          |
| Proletarian Cultural Revolution                          | 1965-1973 | 0.041.           |
| Final Years of the Mao Era                               | 1973-1977 | 0.01             |
| Transition into Post-Mao Era                             | 1977-1982 | 0.09***          |
| Years of Political Liberalization                        | 1982-1987 | 0.00             |
| Tian'anmen Crisis  | 1987-1992 | 0.01             |
| Years of Political Repression                            | 1992-1997 | 0.03**           |
| Turn to Nationalism                                      | 1997-2002 | 0.01             |
| CCP Opens Up to Capitalists                              | 2002-2007 | 0.03*            |
| Contemporary Era   | 2007-2010 | 0.04**           |

## Are legacies of peasant mobilization a key to resilience?

If the CCP is still strong in places where it successfully mobilized peasants before 1949, then is the resilience of Communist parties in Cuba, Laos, Vietnam and North Korea also due to their early successes in peasant mobilization? (Perry, 2007, ft. 98)

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