## Group 3, Project 2, Memo 2

This week, we made progress on both sociological and technological fronts. We produced two schemes for recording our job data into categories that may be usefully subjected to sequence analysis, and have implemented one of them. However, while we have successfully recoded our data, and have the means to calculate pairwise distances, we are yet to implement the clustering algorithm.

Our implemented coding scheme seeks to describe the varying levels of authority a high-ranking Chinese official will have as he or she rises, or fails to rise, to the highest, central positions of government. As a convention of promoting Chinese officials to assume the "central" power, it is very necessary for the candidates to have experience of working at local. Even though there is no such a law or regulations to require all candidates promoted to the central power to have such experience, it is more likely for those who have more experience of working at local to receive a promotion. Therefore, experience of working at "local" plays an important role in their career trajectories. Such experience is essential to evaluate their performances and reason decisions on their promotion. Also, as a part of the Chinese political culture, people who used to work in close provinces tend to develop more propinquity and thereby form political cliniques. Some research finds people who used to work in the coastal provinces are more likely to be "purged" in recent political movements than those who worked in other regions. Therefore, in this research, we use sequence analysis to compare Chinese officials career trajectories, particularly focusing on the level and location of the jobs in their trajectories.

Our coding strategy assigns each type of jobs a letter and number code, according to the job's level of authority and location in the government. We first categorize all "central," federallevel jobs as type A. Under this letter, we group all communist party's job titles at "central" level into "1" (thus, these jobs are assigned the code "A1"), government/administrative jobs into "2" ("A2"), jobs affiliated with National People's Congress (NPC) and Chinese People's Political Consultative Conference (CPPCC) as "A3" and jobs working for the central legal system as "A4".

For provisional level jobs, we categorize them under letter "B". Unlike assigning numbers according to job's responsibility, we group provisional level jobs based on their geographical "regions". Drawing on the conventional definitions of "regions" in China, we come up with 7 subcategories to group all provisional jobs. The coding strategy is as follow (due to the nature of the dataset, Hong Kong, Macau and Taiwan are not included): B1-East-Shanghai, Jiangsu, Zhejiang, Anhui, Fujian, Jiangxi, Shandong; B2-Northeast-Liaoning, Jilin, Heilongjiang; B3-North-Beijing, Tianjin, Hebei, Inner Mongolia, Shanxi; B4-South-Guangdong, Guangxi, Hainan; B5-Central-Henan, Hubei, Hunan; B6-Northwest-Shaanxi, Ningxia, Qinghai, Gansu, Xinjiang; B7-Southwest-Sichuan, Chongqing, Yunnan, Guizhou. B8-all party jobs at provincial level. Besides "central" and "provincial" jobs, there are also military jobs recorded in the dataset. For these jobs, we code them as type "C".

We have assigned tentative substitution, addition, and subtraction costs, with the greatest costs being substitution between positions at the opposite ends of the authority hierarchy. Going forward, it is likely that our greatest challenge will be adjusting and refining these costs to more accurately reflect social stratification.