A SOCIAL NETWORK ANALYSIS OF ELITE CHINESE POLITICS IN THE ERA OF XI JINPING

BY JOHN FERGUSON

李 克 强
LI KEQIANG

A SOCIAL NETWORK ANALYSIS OF XI JINPING-ERA CHINESE ELITE

POLITICAL LEADERSHIP AFTER THE 19TH PARTY CONGRESS

John Ferguson

SOCIOLOGY 1141: Contemporary Chinese Society
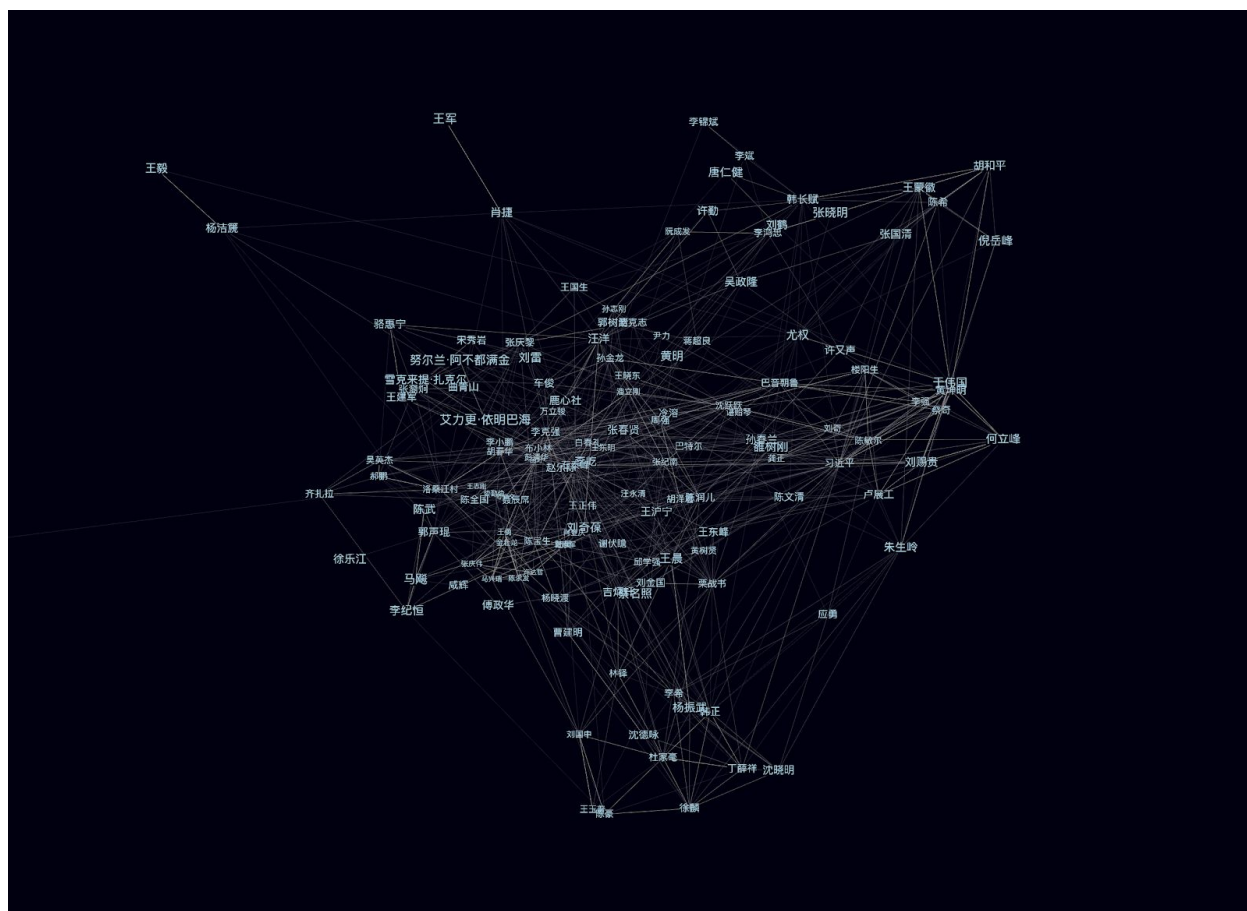
Professor Ya-Wen Lei

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Please note: This paper is intended to be read together with an online interactive visual constructed that can be found at:

www.johnandrewferguson.com/3dforce/chinese_network_names.html (English)
www.johnandrewferguson.com/3dforce/chinese_network_names_zhongwen.html (Chinese)

You can click and drag to manipulate your view. You can also click and drag individual officials to get a better idea of who they are connected to. It looks like the following:

The data is also sorted in an accompanying search tool useful for exploring individual connections found at: www.johnandrewferguson.com/china_connections. Please allow for approximately 30 seconds when loading the full list of 2,114 total career overlap connections.

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Introduction

[1] The CCP (Chinese Communist Party) has proven extremely capable in not only surviving crises that would have surely brought down less capable regimes, but skillfully adapting to embrace tough challenges. One of these challenges has been succession and regime change, which, in the post-Mao era, was seemingly solved by a system of informal norms for retirement and selection of successors, a set of checks and balances between factional alliances and shifting power bases, and patronage networks that allowed the regime to survive. One theory from Heilmann and Perry credits adaptive governance—"fluid ad hoc adjustment and continual experimentation"—while Andrew Nathan's more mainstream view attributes the regime's "authoritarian resilience" to "the increasingly norm-bound nature of [the CCP regime's] succession politics and the increase in meritocratic as opposed to factional considerations in the promotion of political elites."[1][2] After the 19th Party Congress leadership reshuffle in October of 2017, whatever theories that have kept the regime together thus far are being reevaluated and norms requestioned given Xi Jinping's removal of term limits and the failure to promote a potential successor to the PSC (Politburo Standing Committee). The dominant narrative found in the Western press about a return to strongman rule isn't completely true either. An observation picked up by astute Western observers suggested that Xi actually compromised to other opposing power bases and stayed with tradition by having his close confidant and anti-corruption czar Wang Qishan step down from the PSC at his due retirement age of 68. This contradictory and paradoxical analysis led me to pose my research question: *what do the dynamics of elite Chinese politics look like in the era of Xi Jinping after the 19th Party Congress?*

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[1] Sebastian Heilmann and Elizabeth Perry, *Mao's Invisible Hand: The Political Foundations of Adaptive Governance in China*, (Harvard University Asia Center, Cambridge, MA, 2011), 3-4.

[2] Andrew Nathan, "China's Changing of the Guard: Authoritarian Resilience," *Journal of Democracy* 14, no. 1 (2003): 6-7.

[2] While the Chinese political structure is indeed extremely opaque to outsiders with regard to decision-making, these informal norm-bound succession politics and the institutionalized nature of career progression allows for a certain element of predictability. Therefore to answer this question, my paper is an attempt to visually map the networks (measured in geographic, organization, and career overlap) between members of the newest 19th Central Committee in 3d space using a social network analysis (one application of a force-directed graph). While there have been other analyses done of elite Chinese politics before, to my knowledge this is the first such mapping of a post-19th Party Congress Central Committee. Franziska Barbara Keller at the Hong Kong University of Science and Technology in particular has done extensive work plotting social networks of Chinese elites arguing that networks better model informal politics than factions.[3] This paper builds on her work.

Background, History, and Context of Chinese Elite Leadership Pre-19th Party Congress

[3] This current period under Xi Jinping is not unprecedented, but it is a clear departure from how Chinese elites have organized power for the past two decades. Beginning in the mid-1990s with Jiang Zemin and continuing with Hu Jintao, there was a transition from all-powerful strongman rule during the Mao and Deng eras toward a trend of embracing collective leadership. It was Deng who recognized that Mao's strongman rule had been disastrous for China and wanted to prevent a repeat of his tumultuous 27-year reign, thus contributing the most to the development of the concept. He was quoted as saying in 1990 to then CCP General Secretary Jiang Zemin, "The key to China's stability lies in the collective leadership of the Politburo, especially its Standing Committee."[4]

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[3] Franziska Barbara Keller, "Moving Beyond Factions: Using Social Network Analysis to Uncover Patronage Networks Among Chinese Elites," *Journal of East Asian Studies* 16, no. 1 (2016): 17-41.
[4] Cheng Li, *Chinese Politics in the Xi Jinping Era: Reassessing Collective Leadership,* (Brookings Institution Press, Washington DC, 2016), 13.

Methodology

      [4] To technologically construct the social network analysis, I used a combination of

tools including Microsoft Excel, Google Sheets, a CSV to JSON converter, Notepad++, HTML,

Javascript, jQuery, and a force-directed graph template from GitHub. The first step was to refine

the Chinese Political Elite Database (CPED) maintained by Junyan Jiang from more than 4,000

leaders to a smaller, more elite subset of Chinese leadership.[5] I decided to focus on the Central

Committee, the 204-member political body that makes up the apex of authority within the CCP.

The Central Committee houses inner-groups with more concentrations of power in the Politburo

(25) and Politburo Standing Committee (7). The database was organized in the format of a

Chinese Excel spreadsheet with each row holding information about a single job held by a

specific official during a specific time period. I was able to extract the complete career

information for 140 officials, used a Google Translate feature to create an English equivalent,

and cleaned up the data to make it more workable for my intended use by normalizing data that

wasn't consistent throughout. The second step was to create the logic to find the overlaps where

officials worked in the same place during the same year(s). To do this, I had to convert the Excel

data into a format that was more workable which meant converting the Excel data into JSON

format. A small program was written to systematically loop through the JSON data comparing

locations, work units, and time periods and if there is an overlap between two people, it outputs

the data. The specific overlap criteria defines an overlap as matching in first tier location,

matching in first tier work unit, and matching in timeframe with at least one year in common.

This logic produced 2,114 total overlaps (including multiple overlaps between the same 2

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[5] Jiang, Junyan. (2018), Making Bureaucracy Work: Patronage Networks, Performance Incentives, and Economic Development in China.
    American Journal of Political Science

people) and 804 connections (not including multiple overlaps between 2 people). The third step

was to turn these overlaps into a 3D force-directed graph. I used some code available on GitHub

contributed by vasturiano (MIT).[6] His "large-graph" example reads in a JSON file with a slightly

different format than what I had produced earlier, so I re-exported the total overlap data into

Excel to organize the data into "nodes" (officials) and "links" (overlaps) which led to a final

JSON file which could now be read. Finally, to improve clarity, I used a different 3D

force-directed graph "text-node" example (by the same GitHub user) to display the English

names in text as nodes and made a variation with Chinese names.

Key Findings and Observations

[5] Most findings have to do with where officials are located in 3d space relative to others

(determined by the algorithm behind the force-directed graph). It's important to keep in mind

that this graph is based solely on overlaps in career and not any other factor and while it is just

one variable, it's a valuable proxy for power via alliances. When viewed in aggregate, there is a

large mass centered around Li Keqiang near the center, a large distinct cluster of several

officials, and a few isolated "branches" of just two officials.

[6] The mass of gravity centers around Li Keqiang and not Xi Jinping contrary to what

one might think. I theorize that this is because Xi, compared to his predecessors, enjoyed a

relatively quick ascension to the top, skipping straight to the PSC and bypassing the Politburo,

spending less time in the upper echelons of power cultivating relationships compared to his

counterpart Li Keqiang. As a result, Xi actually wasn't personally responsible for the promotion

of many officials under him as a patron. Given Xi's more peripheral location, his power base

therefore isn't as large as you would expect it to be compared to Li Keqiang, who as the de facto

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[6] Vasturiano, "3D force-directed graph component using ThreeJS/WebGL," GitHub repository, https://github.com/vasturiano/3d-force-graph.

head of the Hu-Li faction is ringed by former Hu Jintao surrogates. Taking a look at the immediate neighborhood of Xi Jinping would reveal that the vast majority are from shared careers in Zhejiang and Fujian Province (many are members of what analysts call the New Zhijiang Army). Members in close proximity include Cai Qi, Chen Min'er, Huang Kunming, Lu Zhangong, He Lifeng, Yu Weiguo, Liu Cigui, Li Qiang, Liu Qi, Chen Xi, and Hu Heping. From this group, it appears that Fujian and Xiamen in particular is the preeminent source of Xi allies much more so than Shanghai (which may be seen as an undesirable and unoriginal Jiang stronghold to recruit allies from). While several colleagues of Xi in his early days in Shaanxi have made it extremely far such as Li Zhanshu and now retired Wang Qishan, the overwhelming support structure under Xi, at least from the graph, appears not to be Hebei, Shaanxi (Shaanxi Gang), or Shanghai, but rather Zhejiang and Fujian. I might expect more officials from these two provinces to be poised for promotion to positions of higher authority in the future.

[7] The location of the five new members of the PSC (Li Zhanshu, Wang Yang, Wang Huning, Zhao Leji, and Han Zheng) are extremely evenly distributed throughout the graph supporting some expert opinion that Xi's 19th Party PSC promotions were a compromise to other competing power bases like Hu-Li and the PSC wasn't "packed" with Xi allies as some might have expected. This ensures that Xi can conveniently unite, rally, and ultimately co-opt each PSC member's own networks. Lieberthal and Carol Lee Hamrin extend this idea suggesting that "this arrangement groups most of the major bureaucracies into broad functional clusters and assigns a small group, typically led by a member of the Politburo or its Standing Committee, to manage that policy cluster and to act as a liaison between it and the top decision-makers. These 'leading groups' do not appear on organizational charts, and their membership is not

announced."[7] Upon closer inspection, it does seem that broadly looking at each of the five additional PSC members, each might be located at the center of a "policy cluster." Wang Huning is the most obvious with his closest neighbors in the graph reflecting significant policy work on ideology, culture, and propaganda (Liu Qibao, Luo Shugang, Wang Chen). Li Zhanshu, Wang Yang, Zhao Leji and Han Zheng are less clear.

[8] The standout cluster, spatially, is the science and technology group. The 12 members include Ma Xingrui, Wang Zhigang, Jin Zhuanglong, Chen Qiufa, Xu Dazhe, Yuan Jiajun, Zhang Qingwei, Miao Wei, Lou Qinjian, Gou Zhongwen, Wang Yong, and Xiao Yaqing. There is an overwhelming dominance of aerospace and particularly missile technology as opposed to any other kind of science. Many were former directors of the China National Space Administration like Ma Xingrui and Chen Qiufa and/or responsible for historical space missions like Chang'e 3 or the Shenzhou program. It's interesting to note that two members, Wang Yong and Xiao Yaqing are also part of this cluster despite not serving in any science-focused roles but rather as the head of the State-owned Assets Supervision and Administration Commission (SASAC) tasked with regulating state-owned enterprises (SOEs) and reform. The other example is Gou Zhongwen, director of the State General Administration of Sports and head of the Chinese Olympic Committee. This might indicate that China, especially under Xi is taking an extremely scientific approach to its Olympic training program and to its restructuring of SOEs. For sports in particular, Gou has established a laboratory standard via whole genome sequencing for the selection of athletes to represent China in the 2022 Beijing Winter Games.[8] It's worth noting that while all these men have technology backgrounds, many have and currently hold

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[7] Kenneth Lieberthal, *Bureaucracy, Politics, and Decision Making in Post-Mao China* (Berkeley: University of California Press, 1992), 13-14.
[8] Stephen Chen, "Gattacca by 2022? China to select Winter Olympic athletes by their genes," *South China Morning Post*, August 31, 2018, https://www.scmp.com/news/china/science/article/2161866/china-genetically-screen-its-athletes-ensure-best-compete-2022.

powerful leadership roles in both the state (governor) and the party (secretary). I would have perhaps expected technocratic management to dominate the state rather the party. There appear to be more overlaps between this science and technology cluster and the Li Keqiang mass rather than Xi Jinping's immediate vicinity, in line with the view that technocrats dominated the Hu Jintao era (and therefore the inherited networks of Li Keqiang) while promotion under Xi favors consistent domestic leadership.[9] It is worth noting however that these *science and technology elites* are extremely tight-knit compared to the wider community of *business elites*. The science cluster is dominated by the military-industrial aerospace complex with several officials serving as the head of large SOEs, but SOE business executives in more diverse industries like energy (Wang Yupu - Chairman of Sinopec) or finance (Guo Shuqing - China Construction Bank, Jiang Chaoliang - Agricultural Bank of China) are nowhere near the science cluster or each other for that matter. The wider business community may be too fractured and disorganized to "congeal into a new elite group," as Cheng Li of Brookings suggests, lacking the shared career experience across industries to form any meaningful connections despite the smaller science cluster having potential.[10] It's interesting to note that there is no distinct banking or finance cluster. In my view, Xi's overall strategy is to promote more SOE business executives to make SOEs bigger and stronger as stated in his grand economic strategy, partially as a hedge against the explosion of powerful private conglomerates in tech that could pose a challenge to the authority of the party and partially to build his own technocratic power base not in science and technology, but mostly in finance and banking. However, there are conflicting views as 2017 reports indicate that "no

[9] Viola Zhou, "Out with the technocrats, in with China's new breed of politicians," *South China Morning Post*, October 26, 2017, https://www.scmp.com/news/china/policies-politics/article/2117169/out-technocrats-chinas-new-breed-politicians.

[10] Cheng Li and Lucy Xu, "The rise of state-owned enterprise executives in China's provincial leadership," *Brookings*, February 22, 2017, https://www.brookings.edu/opinions/the-rise-of-state-owned-enterprise-executives-in-chinas-provincial-leadership/.

executives from SOEs made it to the Central Committee as full members—a dramatic change from 2012."[11] In my view, Xi recognizes that most of China's challenges now lie in adeptly engineering the complex third economic revolution amid a global economic system in flux to transition the drivers and structure of the Chinese economy from a government investment-fueled, export-based model to a slower, more domestic consumer demand-driven model.[12] Perhaps Xi is looking to place greater weight on banking and financial expertise over more antiquated SOE management experience. Analysts have most recently observed a surge in the promotion of young banking-sector officials to key posts (most likely the doing of Wang Qishan known as a capable "financial firefighter") and this might be the reason why.[13]

[9] One isolated branch is the foreign policy establishment which includes just two members: Wang Yi and Yang Jiechi. Yang previously served as Foreign Minister and is one of the foremost contemporary architects of China's foreign policy while Wang Yi is the current incumbent.[14] This came as a surprise given the prominence Xi Jinping has given to foreign affairs and China's presence on the world stage during his tenure, particularly with his signature Belt and Road Initiative.[15] Not only are these two spatially isolated and siloed in the graph, but the fact that there are only two members of the foreign ministry is intriguing. This might suggest that foreign policy decision-making may be more decentralized than previously thought and ambassadors are more symbolic than anything. In reality, Chinese business elites most likely

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[11] Wendy Wu, "Chinese state firm executives frozen out of Central Committee as Xi Jinping's anti-corruption plan bites," *South China Morning Post*, October 26, 2017.

[12] "China Built a Global Economy in 40 Years. Now It Has a New Plan," *Bloomberg Businessweek*, December 15, 2018, https://www.bloomberg.com/news/features/2018-12-15/president-xi-jinping-s-next-moves-dictate-china-s-economic-future.

[13] Shunsuke Tabeta, "Xi ally Wang Qishan behind Beijing's selection of young leaders," *Nikkei Asian Review*, October 27, 2019, https://asia.nikkei.com/Politics/Xi-ally-Wang-Qishan-behind-Beijing-s-selection-of-young-leaders.

[14] Shi Jiangtao, "Will China's new foreign policy dream team by the key to achieving its global ambitions?," *South China Morning Post*, February 25, 2018.

[15] Andrew Chatzky and James McBride, "China's Massive Belt and Road Initiative," *Council on Foreign Relations*, May 21, 2019, https://www.cfr.org/backgrounder/chinas-massive-belt-and-road-initiative.

wield more influence globally and are the primary conduit for conducting foreign affairs given China's pragmatic, realpolitik, and hard economic approach to international relations. The observation that Xi prefers to entrust the handling of high-visibility foreign relationships to high-ranking close confidants of his inner circle instead of professional career diplomats supports this idea. Li Zhanshu's independent trips to Russia as personal liaison to Vladimir Putin or Wang Qishan dealing with the United States are examples.[16][17][18] Another isolated branch deals with water resources claiming just two members: E Jingping and Li Guoying. This leads me to believe that specializing in such a niche and technical field without a clear contribution to the military-industrial complex is a great disadvantage for creating political connections. The final isolated branch is a mystery: Wang Jun and Xiao Jie are connected and isolated for no apparent reason.

[10] For other interesting observations, the two military generals I had data on (Zhu Shengling and Liu Lei) were not in the same vicinity, contrary to my expectations. Perhaps high-ranking military leadership has been strategically alienated to limit the possibility of a military alliance with one particular power base and/or to prevent a military coup from seizing power. Interestingly, when it comes to the 16 ethnic minority officials, all groups (Bai, Hui, Miao, Zhuang, Xibe, Manchu) are scattered throughout except for one joint Kazakh-Uyghur-Tibetan cluster that boasts five members.

Limitations

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[16] Teddy Ng, "Xi Jinping to send right-hand Li Zhanshu to North Korea," *South China Morning Post*, September 4, 2018, https://www.scmp.com/news/china/diplomacy/article/2162756/xi-jinping-send-right-hand-man-li-zhanshu-north-korea.

[17] Choi Chi-yuk, "Li Zhanshu: key aide to China's Xi Jinping vaults to top of Communist Party," *South China Morning Post*, October 25, 2017, https://www.scmp.com/news/china/policies-politics/article/2116576/li-zhanshu-key-aide-chinas-xi-jinping-vaults-top.

[18] Jun Mai and Wendy Wu, "Is 'firefighter' Wang Qishan working behind the scenes on trade talks?," *South China Morning Post*, July 2, 2019, https://www.scmp.com/news/china/politics/article/3017001/firefighter-wang-qishan-working-behind-scenes-trade-talks.

[11] The resulting social network does not hope to capture the complexity and nuance of elite politics in China as there are a myriad of factors that contribute toward closeness that either were not accounted for or are impossible to observe as an outsider. Familial ties (such as fathers being close during the Cultural Revolution), informal ties formed during spare time or in economic activities outside of their official government capacity, or any financial ties like investments, shares in a company, or board seats are not factored in. For even just the one attribute of career overlap that I examined, there was a significant portion of the data that was missing (The CPED is missing data for 64 members out of 204 total). Correlation also doesn't mean causation—just because there was an overlap doesn't mean they are allies, they could have been competitors or never even crossed paths. Lastly, using a network analysis to study Chinese elite politics is particularly tough given that this network doesn't account for the behind-the-scenes influence of retired leaders (a unique characteristic of Chinese politics) or produce any insight about who will make up the sixth generation of leadership (while the data is available from the CPED, the scale becomes too vast to make any meaningful predictions).

A Look to the Future

[12] After completing this research, my overall impression is that this is just the tip of the iceberg in terms of what social network analyses can offer in terms of understanding the dynamics of elite Chinese politics. This project got me thinking about completing a senior thesis that builds off of this work where methodology and research design can certainly be improved. I could reconstruct multiple past party congresses and compare across administrations to see how elite Chinese politics has evolved over time and contextualize how politics in the Xi era may be different. A more complete picture could be achieved by aggregating, consolidating, and

normalizing different datasets to fill in the gaps to include senior military leadership and alternate members and also track other kinds of data like the appearances and travel of approximately 500 leading Chinese officials (Carnegie's China Vitae database).[19] A future social network analysis therefore might be modeled on a combination of factors assigned different weights depending on importance—hometown, career overlap, alma mater, co-travel appearances, visits by Xi Jinping, KPI scorecards, economic development metrics, etc. This kind of work could also be augmented with the inclusion of different kinds of elites i.e. economic and business elites who may not be high-ranking CCP members but still wield considerable influence on CCP decision-making. I envision a senior thesis could be more technical: immersive AR and VR versions could facilitate more interaction such as more detailed biographical information on each official, a search function, and a feature that could highlight an official's connections and network when selected for clarity. The most exciting opportunity would be to apply machine learning algorithms and let AI identify and analyze networks or even predict the future given a set of constraints—it could theoretically extrapolate and build models to forecast different scenarios and outcomes based on how likely one is to be promoted.

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[19] "VIP Appearances & Travel," *China Vitae,* Carnegie Endowment for International Peace, December 8, 2019, http://www.chinavitae.com/vip/.

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