Ideas Mobilize People: The Diffusion of Communist Ideology in China*

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Abstract

We study how exposure to the Communist ideology shaped individuals' choice to join the Chinese Communist Party (CCP) during the party's formative stage. The individuals we focus on are the cadets at the Whampoa Military Academy who subsequently fought China's most important wars in the 20th century. Our identification strategy exploits the locality-time variation in the circulation of the *New Youth* magazine—the major channel to promote Communism after the Treaty of Versailles in 1919—and the variation in an individual's location over time. We demonstrate that those who happened to be living in a locality with the post-1919 *New Youth* available were significantly more likely to join the CCP, compared with their peers who had lived in the same locality but missed this channel. In future political struggles, those whose party choice was more influenced by the ideology channel were less likely to quit the CCP and more likely to sacrifice their lives. Our findings highlight the importance of ideas in shaping political movements and contribute to understanding the spread of Communist ideology—an important yet understudied political event in modern history.

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1 Introduction

How do people get mobilized into collective action that sometimes changes the trajectory of history? Among many determinants, the importance of ideas has long been noted and debated.[1] At the same time, the impact of ideas on individuals is often elusive and difficult to prove. In this study, we use the spread of Communist ideology in China to demonstrate how ideas can affect individuals' political actions, which ultimately shaped the fate of modern China.

The spread of Communist ideology was one of the most significant political events of the 20th century: For a large part of the century, about one-third of humanity lived in Communist countries. Yet, little is known about how such an ideology got diffused across vastly different contexts ranging from Germany and Italy in the west to China and Indonesia in the east. China during the 1910s–1920s provides a useful context in which the Communist ideology was spread via the printing press, especially periodicals. As well recognized by abundant historical narratives, the most prominent press in spreading communist ideology is the *New Youth* magazine, a leading literary magazine founded in 1915 that initiated the New Culture Movement (1915–1923) but turned to promoting Communism after the Treaty of Versailles in 1919.[2]

Identifying the impact of ideology diffusion, however, is challenging. First, it is usually difficult to differentiate ideological exposure from other omitted variables. For instance, the circulation of the *New Youth* magazine across localities is likely to be associated with other locality characteristics. Second, it is also hard to determine the population that was influenced by the ideology. In a setting like ours where over 80% of the population were illiterate, it is conceivable that only a small share of the population who were literate could be influenced. Although these individuals might become pioneers in the coming Communist revolution, it is challenging to pinpoint who they were.

We overcome these challenges by exploiting a specific and important environment: the choices of individuals at the Whampoa Military Academy to become a Chinese Communist Party (CCP)

[1]The debate between idealism and materialism as explanations of history has been going on from the early days of civilization. Among modern classical works, Hirschman (1977) discusses how the ideas of capitalism have emerged. Berlin (1979) emphasizes the importance of dissenters in the history of ideas.

[2]Even though China was on the winning side of WWI, the Treaty of Versailles allowed Japan to retain territories in Shandong that had been surrendered to Germany. Such actions of Western powers seriously undermined the moral prestige of the West in China and directed the leadership of the *New Youth* towards Russia for enlightenment. See more on the background in Section 2.

member at the CCP's formative stage in the 1920s. The Whampoa Military Academy was established in 1924 and produced commanders and legendary graduates who subsequently fought China's most important wars in the 20th century, including two civil wars between the CCP and the Kuomingtang (KMT) and the anti-Japanese war. The first cohort of Whampoa included 698 individuals who provided detailed information on their life history before getting enrolled. Their rich biographical information provides a laboratory to study political choices at the individual level in an important historical setting.

Specifically, we examine how Communist ideology exposure via the *New Youth* affected an individual's choice to become a CCP member. Our identification strategy leverages three variations: the time-varying geographical variation in the circulation of the *New Youth*, the time-varying location of the individuals, and the time variation of contents of the *New Youth*. The individuals who were most likely to be influenced by the Communist ideology should be those who were living in a locality with the *New Youth* available after the magazine started promoting the Communist ideology in 1919. We address the important challenge that ideology exposure is correlated with other locality characteristics by controlling for locality fixed effects. Our analyses use two definitions of localities—prefectures and counties[3]—for comparison and robustness. We show that conditional on locality fixed effects, individuals with or without access to post-1919 *New Youth* are comparable in terms of a rich set of personal characteristics, including family socioeconomic status, education, the political identities of one's references, age, numbers of siblings and children, marriage, and even behavioral traits such as smoking and drinking. In other words, given the same locality, whether some cohorts got exposed to the Communist ideology is close to being random. This pattern suggests that individuals' locations are primarily driven by economic concerns (especially education and jobs) rather than the presence of the *New Youth*.

We find that being exposed to the *New Youth* during 1919–1922 at the prefecture-level increases an individual's probability of joining the CCP by 11.7 percentage points, compared with his peers who had lived in the same locality but missed this exposure. The magnitude becomes 17.2 percentage points when we zoom into county-level exposure. These estimates imply a persuasion rate of at least 18.9%. This relatively large persuasion rate is partly because our studied sample is a group of educated young (whose average age was 18 in 1919) on which ideology exposure may be particularly important. In contrast, other personal characteristics, except for the political identity of one's references, cannot predict one's choice between the CCP and the KMT. We do not find

[3]A prefecture is a collection of a city and surrendering counties. Roughly speaking, one prefecture consists of ten counties.

strong heterogeneous impacts of ideology exposure with respect to various personal characteristics either. The relatively little impact of economic status in our setting is partly because the CCP was at its inception stage and faced a great deal of risk, as evidenced by the future outcomes of these individuals we also study.

Two main concerns of our main finding are whether the *New Youth* entered certain localities due to potential demand for the Communist ideology and whether individuals relocated in response to the availability of post-1919 *New Youth*. We should note that our estimate is similar even if we further control for the interactions between prefecture fixed effects and the post-1919 dummy, which allows us to control for possible change in the demand for Communism in different prefectures before and after 1919. Moreover, we take a closer look at possible endogeneity concerns regarding the circulation locations of the *New Youth* and the relocation of individuals. First, we find that exposure to the *New Youth* during 1915–1918 had no similar influence on the CCP choice, suggesting that our finding is not driven by the endogenous entry of the *New Youth*. Second, our estimate is similar when restricting the exposure to the localities always with the *New Youth*, which helps shut down possible entry considerations of *New Youth* after 1919. Third, to capture the location of preferences of an individual, we construct placebo locations of an individual by assuming that he were in his previous or next location based on his life event records. We use these placebo locations to calculate placebo exposures to post-1919 *New Youth* and find that these placebo exposures cannot explain our finding. Finally, we separate our comparison group into two subgroups: (i) those who had never been to localities with post-1919 *New Youth* and (ii) those who had been to localities with post-1919 *New Youth* available but just missed the magazine. We find an estimate similar to our baseline when comparing with group (ii) whose relocation is not driven by the presence of post-1919 *New Youth*. We also discuss concerns revolving around possible measurement error at the locality or individual level and show that our findings are unlikely to be driven by measure error at the locality or individual level.

We focus on post-1919 *New Youth* exposure because it is widely recognized as the main channel for Communist ideology diffusion (see qualitative evidence in Section 2). It is certainly possible, however, for our studied individuals to read other magazines or got exposed to activist groups in this period, some of which also help spread Communist ideology. We conduct three sets of analyses to validate the importance of post-1919 *New Youth* for our finding. First, based on archival information on 19 pro-Communism periodicals that had ever existed during 1919–1922, we characterize the network of these magazines by examining whether they shared editors or editorial offices: the *New Youth* was the most central magazine whose editors often helped co-found other magazines. Second,

when comparing exposure to post-1919 *New Youth* to that of two other pro-Communism magazines in the network, we find that few would be exposed to the other magazines without being exposed to post-1919 *New Youth*. Our estimates are similar whether we further consider these additional periodicals. Third, we use archival information on activist groups in this era and find our result holds in localities without these groups. In addition, there exists some complementarity between ideology exposure we focus on and the presence of these activist groups. All these results support that the post-1919 *New Youth* is a reasonable proxy for Communism diffusion.

In the last part of our analyses, we examine whether individuals mobilized by ideas behave differently in critical historical moments. This is an important yet challenging issue to study. We explore this issue by investigating the future outcomes of our studied individuals in various political struggles, during which many quitted their parties and scarified their lives. We find suggestive evidence that those who were more influenced by the Communist ideology exposure channel behaved differently: These individuals were less likely to quit the CCP and more likely to sacrifice their lives in the conflicts. Moreover, this difference is primarily driven by the period from 1927 to 1936 (i.e., the first Civil War between the CCP and the KMT), when the CCP was the weaker party and was under severe attack by the KMT. These findings suggest that the initial ideology exposure can work together with other factors in the revolution process to lead to significantly different political choices.

Our study contributes to evaluating the importance of ideas in shaping political and economic processes, which has long been recognized but difficult to quantify. In a series of perceptive works, Joel Mokyr points out the importance of a set of ideas collectively known as "the Enlightenment" in creating the Industrial Revolution (e.g., Mokyr 2005). A burgeoning literature in economics has explored the impacts of ideological exposure on voting (e.g., DellaVigna and Kaplan 2007), public opinion (Cantoni et al. 2017) and policy-making (Ash, Chen and Naidu 2022). The evidence on the relationship between ideas and large-scale political and social movements, however, is scarce. To the best of our knowledge, our study is the first to trace the diffusion of Communist ideology in an important context and demonstrate its impacts on individuals' political choices.[4]

Our findings also contribute to understanding what motivates individuals to participate in political and social movements. There exists a long-standing literature in political sociology on this topic (see Walder (2009) for a review). Recent empirical investigations have documented the

[4]There exist many volumes of historical studies on Communism, focusing on a few nations as examples (Smith 2014). Magness and Makovi (2022) document that the Russian Revolution played a central role in mainstreaming the ideas of Marx. In our setting, the Russian Revolution and the Treaty of Versailles facilitated the adoption of Communism in China.

importance of social networks (e.g., Satyanath, Voigtländer and Voth 2017, Cantoni et al. 2019, Enikolopov, Makarin and Petrova 2020) and individuals' social mobility prospect (e.g., Bai and Jia 2016, Houle 2019) in determining the participation in political movements. In our setting, we also find one's own political choice is positively associated with his references' political identity, consistent with the influences of social networks.[5] We also find some complementarity between social networks (proxied by the identity of one's references and the presence of activist groups) and ideology exposure we focus on. In contrast, one's socioeconomic background is not predictive of one's choice of the CCP membership. In scenarios where the political or social movement faced a great deal of risk like ours, ideas and social influences are likely to be particularly relevant.

Scholars studying the origins of the CCP have well recognized the formative role of the *New Youth* (e.g., Dirlik 1989, Meisner 1999, Smith 2000, Ishikawa 2013). However, due to the empirical challenges mentioned above, the influence of the *New Youth* remains a historical conjecture. Our study provides an approach to trace the spread of the *New Youth* and evaluate its impact on the political choice of a group of individuals who jointly determined China's political path. Although we focus on China in this study, the role of the press in spreading Communist ideology, especially in shaping the actions of the literate class, is likely to be relevant in other contexts. In this lens, our study joins a growing literature on the impacts of media in shaping political behaviors. The existing literature has documented the influence of various forms of media in a variety of contexts (see DellaVigna and Gentzkow (2010) for a review), most of which focus on macro-regional patterns.[6] Our setting provides individual-level evidence and highlights the role of magazines whose influence has not been paid much attention by existing studies. Moreover, beyond demonstrating the causal impact of ideology exposure on political actions, we find suggestive evidence that such an impact may also partly determine the choices of the political pioneers in critical moments of history.

2 Background and Data

2.1 The *New Youth* (1915–1922) and the Founding of the CCP in 1921

The period of 1910s–1920s is known as the "Chinese enlightenment" (Schwarcz 1986), exemplified by the New Culture Movement (1915–1923), the later stage of which is also known as the May

[5]This pattern is nicely summarized as "from friend to comrade" by Van de Ven (1992).

[6]Influential examples include but not limited to DellaVigna and Kaplan (2007) and Adena et al. (2015).

Fourth Movement (1919–1923).[7] Arising out of disillusionment with traditional Chinese culture following the failure of the Beiyang government (1912–1928) to address social and economic problems, many intellectuals joined the movement to promote a new culture based upon western ideals, particularly democracy and science. The movement was launched by the writers of the *New Youth*, a monthly magazine founded in 1915 by Chen Duxiu. Different from those who thought that democracy and constitutional government could be easily established in China, he argued that there must be a change in the *thought* of the people such that their attitudes will support the constitutional government (Chen 1916). He believed that there couldn't be a new political system without a new culture.

Following the emphasis on culture, the *New Youth* magazine initially focused on culture and literature debates such as the promotion of written vernacular Chinese over classical Chinese. It became popular very quickly: Its monthly circulation rose from 1,000 for its first issue to over 16,000 after 1917 (Chow 1960). Over time, frustrated with the inadequacy of cultural change and influenced by the Russian Revolution, the magazine's leadership led by Chen Duxiu and Li Dazhao, started considering more political actions. The Treaty of Versailles in 1919 marked a turning point in this transition, when Chinese intellectuals were disillusioned at the compromising of Chinese interests by Western powers and found the Russian way as a new role model.[8] In May 1919, the *New Youth* published a special issue on Communism. After that, the magazine became increasingly aligned with the Communist ideology and served as the fountainhead of Chinese Communism (Ishikawa 2013).

To see the shift in ideology, we plot the shares of *New Youth* articles titled with certain phrases in Figure 1. Panel (a) focuses on different nations. As shown, when *New Youth* started in 1915, France and Britain were the most frequently referenced, reflecting the promotion of western ideals. In contrast, after 1919, Russia became the most frequently discussed and accounted for 10–15% of all articles published in a given year. Panel (b) focuses on selected phrases reflecting topics. As expected, the culture/literature topic dominated initially but the political discussions related to Communism and revolution became the dominant topics after 1919–20. In Appendix A.1, we further plot the most frequently used characters in the titles. As shown, after 1919, the characters related to

[7]The May Fourth Movement is named after the May Fourth incident on May 4, 1919. On that day, students gathered in front of Tiananmen to protest the government's weak response to the Treaty of Versailles decision. These demonstrations sparked nation-wide protests and contributed to the demand for political actions.

[8]In sharp contrast with the Treaty of Versailles, the Karakhan Manifesto, issued in 1919 on behalf of the Soviet government, nullified unequal treaties which Czarist Russia had forced upon China. Not surprisingly, Russia "ascended the ideological throne forfeited by the West, and became the symbol of justice and freedom" (Huang 1964).

Communism (e.g., labor, Russia, socialism, Marx and revolution) stood out. As reflected by these characters, Communism can be considered as a set of ideas related to a proletarian revolution that involves getting organized for "unified action" (Dirlik 1989).

The leaders of the *New Youth* were also among the ones who founded the CCP. In July of 1921, the first National Congress of the CCP was held in Shanghai. Chen Duxiu was elected as the Chief Party Secretary in this congress, following which the *New Youth* became a theoretical journal for Communism. The *New Youth* published its last issue in July 1922.[9] With a few interruptions during 1915–1922, the *New Youth* published 54 issues in total, which have served as an important source for studying the political intellectual history of modern China.

Abundant anecdotal evidence exists on the importance of the *New Youth* in shaping the ideology of the young in this era, including memoirs from the future leaders of the CCP. For instance, Mao Zedong was one of the avid readers and made his first contribution to the magazine in 1917. In his 1936 interview with Edgar Snow (Snow 1937), Mao reminisced:

> "I began to read this magazine [*New Youth*] while I was a student in the normal school and admired the articles of Hu Shi and Chen Duxiu very much. They became for a while my models, replacing Liang Qichao and Kang Youwei, whom I had already discarded."[10]

Similar recognitions of the formative role of the *New Youth* can be found in the self-reflections of Communist pioneers including Zhou En-lai's discussion with Edgar Snow (Snow 1937), Yun Daiying's diaries (Yun 1981), Deng Xiaoping's autobiography written in 1926 (Yang 1994), and Shi Cuntong's memoir (Yeh 1996). Notably, these individuals were located in various regions, indicating that the influence of the *New Youth* went beyond metropolitan cities like Beijing and Shanghai.

Given the importance of the *New Youth*, few scholars studying the history of the CCP have missed mentioning it. As put by Meisner (1999), "it is difficult to overestimate the importance of the intellectuals who coalesced around the *New Youth*, for their writings molded the beliefs and attitudes of a whole generation of young students who were to achieve political prominence after the May Fourth incident of 1919 and who were to become the leaders of the modern Chinese revolution."

[9] Although the original *New Youth* was stopped in 1922, the CCP continued to use the title for a new quarterly journal during 1923–1926. Because of the timing of the outcome of our study, we do not focus on this latter period.

[10] Liang Qichao and Kang Youwei were influential intellectuals who proposed reforms (instead of revolution) of the imperial system.

2.2 The Whampoa Military Academy (1924–1927)

The Whampoa Military Academy was established in 1924 in Whampoa, Guangzhou. Its establishment was proposed and supported by the Soviet Union. Under the demand of the Soviet Union, the KMT formed a political alliance with the CCP in 1924 to fight against the incumbent Beiyang government and other regional warlords. In this era known as the First United Front, the KMT was the dominant revolutionary party whereas the CCP was at its nascent stage. In fact, everyone at Whampoa was required to be a KMT member while one could choose to join the CCP (if they hadn't before 1924). This KMT-CCP collaboration, however, broke up in 1927, which marked the beginning of a civil war that would last until 1937. During 1937–45, the KMT-CCP formed a second political alliance (i.e., the Second United Front) to fight against Japan. After winning the anti-Japanese war, however, the KMT and the CCP fought another civil war until the CCP won the mainland in 1949 and the KMT withdrew to Taiwan.

Despite a relatively short life, the Whampoa Military Academy played a profound role in Chinese modern history. Whampoa concentrated the revolutionary military talents at the time and its training followed the Soviet Red Army model. The exigencies of the revolution limited the time available for training, which lasted half a year for most of the cohorts. The emphasis was on the practical knowledge and skills required in the battlefield (Graff and Higham 2012). These Whampoa cadets would become commanders for both the KMT and the CCP and fought both the civil wars and the anti-Japanese war mentioned above.[11]

Moreover, the Whampoa graduates have also influenced both parties' policies and governance. For Chiang Kai-shek, the leader of the KMT, the "Whampoa clique" was the pivotal force for his military organization and governance (Taylor 2009). For the CCP, when it built its first Red Army in 1927, most of its commanders were also from Whampoa. In the following two decades, the CCP trained its army in the Whampoa way, which would finally bring the CCP victory.[12] In 1955, the CCP ranked the Ten Founding Marshals of the People's Republic of China, and five out of these ten marshals were affiliated with the Whampoa in the 1920s.

[11] For instance, the legendary commanders on KMT side include Chen Cheng, Du Yuming, Xue Yue, Hu Zongnan, Hu Lien and Guan Linzheng, whereas the Communist side includes Lin Biao, Xu Xiangqian, Liu Zhidan and Chen Geng.

[12] See the account from the official CCP website: http://cpc.people.com.cn/GB/85037/8068317.html

2.3 The Timeline

We provide a timeline of the key events during the 1910s–1949 in Figure 2. Our study focuses on how the exposure to the Communist ideology via the *New Youth* during 1919–22 affected the choice to become a CCP member in CCP's formative stage (1921–27). As shown, the number of CCP members was initially limited but grew dramatically in this era: There were only 432 registered Communist members at the 3rd National Congress of the CCP (June 1923), but this number rose to over 57,000 at the 5th National Congress (April 1927). The great expansion of the CCP triggered the repression from the KMT and the first CCP-KMT civil war mentioned above. In addition, we explore the future outcomes of our studied individuals from the 1920s to 1949 to shed light on the long-run impacts of ideology exposure.

We also plot the founding years of Communist parties in other countries in Figure 2. As shown, after the Russian Revolution, Communist parties emerged in many countries. In this lens, the origin of the CCP is one of many examples facilitated by both international politics and domestic tensions.

2.4 Data

We present the summary statistics in Appendix A.2 and the data construction process in detail in Appendix A.3–A.4. Below, we describe our key variables.

The First Cohort of Whampoa. There were 706 individuals in the first cohort at the Whampoa Military Academy, among which 17 individuals did not have any information.[13] We focus on all 689 individuals with information. Among them, 530 were directly recruited by Whampoa and were required to provide detailed information on family background and life history at the time of enrollment in 1924. At Whampoa, they were assigned to be Teams 1–4. Appendix A.3 presents an example of the life history records, based on the *Detailed Survey for the First to Fourth Teams of the First Cohort of the Military Academy* (Central Executive Committee of the Kuomintang 1924). The other 159 cadets were recruited from a regional military school in Guangzhou. We obtain information on the background of all 698 individuals from the work of Chen Yuhuan, a historian and Whampoa expert (Chen 2017). In our analyses, we use all 689 individuals and present results when restricting to Teams 1–4. We provide an example of our coding of life events in Appendix A.4.

[13] These individuals left the Whampoa before graduation.

We should note that not everyone wrote down their life events year by year. Some omitted the ending years of their life events. In these cases, we assume that a life event lasted until the starting year of the next event. This assumption may create measurement error, which we discuss in detail in our analyses. We also conduct checks regarding the precision of life events.

CCP Membership and Future Political Outcomes. The main outcome of our analyses is the CCP membership. Because the individuals we study played important roles in the decades following their Whampoa study, there exists systematic information on their political party identification and career trajectories including whether they chose to quit their parties or died in the later political struggles between the KMT and the CCP. We code these variables from Chen (2017) and validate the data via Wikipedia and Baidu. Although it is possible for an individual to hide his CCP membership in the 1920s, this is not a concern for our study as our information the CCP membership is based on information disclosed later.

As mentioned above, CCP was much weaker than the KMT in the 1920s. On average, 17.1% of our sample joined the CCP, and most (77%, 91 out of 118) of these CCP members joined before 1925.[14] 30.2% of our studied cadets died in the future conflicts and 19.8% quitted their parties (including surrendering to the other party in conflicts). These numbers highlight the risk and uncertainty of the revolution.

Personal Characteristics. We consider 13 variables of individuals' personal characteristics that can be categorized into three groups below. Together, they provide a portrait of these cadets: These were a group of men in their early 20s in 1924 who had received middle-school or secondary-school education and came from families of the middle and lower strata in the society.

(i) Education and socioeconomic background. As reported in Appendix A.2, 96% of the cadets had completed middle-school education and 61% attended secondary vocational schools. 11% had some college education or attended some college classes but usually did not hold college degrees. 54% came from families with some education tradition or some business; 39%, 58%, and 3% ranked their family status as "poor", "middle-income", and "rich". We code this status as a categorical variable (1–3), which has a mean of 1.63.

We also know the political identity of the references for their applications to the Whampoa and can measure how many CCP references one had. This variable proxies whether one had direct or

[14]By the 4th National Congress of the CCP (Jan, 1925), there were 994 registered Communist members. Our sample accounts for 9.2% of all registered CCP members.

indirect connections with other CCP members and can be considered as a crude measure of social networks. This variable ranges from 0 to 5 and has a mean of 0.18, implying that few could directly access CCP references by 1924.

(ii) Demographic information. Their average age was 23 in 1924. Their average number of siblings is 3.4. 54% of them were married and 14% had children, reflecting marriage at an early age in this era.

(iii) Religion and behavior traits. 11% reported to believe in some religion (mostly Confucianism and Buddhism). 5% reported a habit of smoking or drinking.

Exposures to the *New Youth* and Communist Ideology. Each year, the *New Youth* provides information on its circulation location in at least one issue, which we use to construct prefecture-year and county-year datasets on the availability of the *New Youth*. The variation in circulation is driven by both the expansion effort of the magazine and the censorship of the Beiyang government. We present an example for the circulation data and a map of the circulation locations over time in Appendix A.4 (Step 1). Over the years, the *New Youth* spread to 53 prefectures that covered 37.9% of China's population in 1920.[15]

Our measure of the *New Youth* exposure comes from the interaction between the locality-year circulation variation and the variation in an individual's life history. We explain our coding process of life history and present the maps of the cadets' locations over time in Appendix A.4 (Step 2). By 1924, our studied individuals had been to 160 prefectures that covered 80.0% of China's population in 1920.

Considering that A and B had lived in the same locality. Person A could be exposed because he happened to be there during the years the *New Youth* was available, whereas Person B could have left the locality or have not arrived during the years the *New Youth* was available. We further illustrate the interaction between cadets' locations and *New Youth* locations in our data in Appendix A.4 (Step 3). Our measure of Communist ideology exposure further considers the ideology change of the *New Youth* before and after 1919. If an individual was living in a prefecture (or county) when post-1919 *New Youth* was available, we define him as being exposed to Communist ideology. By this design, we are studying an intention-to-treat effect. In addition to the dummy indicator of exposure, we also present the results using a continuous variable that calculates the number of exposure years.

[15]We focus on all 18 provinces in China proper in this calculation, as indicated by the maps in Appendix A.4.

3 Descriptive Evidence and Research Design

Descriptive Evidence. Did exposure to the *New Youth*, more specifically to post-1919 *New Youth*, make a difference? We present two pieces of motivational evidence from the raw data. The first is the pattern over time that suggests the relevance of the Communist ideology. Specially, we divide the individuals into the exposed group (who was living in a prefecture with the *New Youth*) and the non-exposed group and examine the difference in the probability of joining the CCP between them. As shown in Figure 3(a), the difference in the probability of joining the CCP turned positive after 1919–20, which coincides with the timing of promoting Communism by the *New Youth*. The pattern is very similar when we define *New Youth* exposure at the county level, as shown in 3(b).

The second piece is the pattern across space that suggests a general relevance of the ideology exposure. Here, we plot the numbers of CCP members among the group with post-1919 *New Youth* exposure across prefectures in Figure 4(a), and similarly, such numbers among the group without post-1919 *New Youth* exposure across prefectures in Figure 4(b). On average, the mean ratios are 20.5% and 12.0% for these two groups, indicating a higher CCP probability for the group with post-1919 *New Youth* exposure in the raw data.

Estimation Strategy. The main challenge we face is that the post-1919 *New Youth* exposure may reflect other locality characteristics. We address this by controlling for locality fixed effects and use the variation that stems from the circulation change of the *New Youth* and an individual's lifetime events. The specification for prefecture-level exposure is as follows:

$$CCP_{i,p} = \beta NYExposure_{p,1919-22} + \alpha NYExposure_{p,1915-18} + Pref_p + X_i + \epsilon_{i,p} \quad (1)$$

where $CCP_{i,p}$ is a dummy variable indicating whether individual i who had lived at any prefecture p became a CCP member or not. $NYExposure_{p,1919-22}$ and $NYExposure_{p,1915-18}$ refer to the availability of the *New Youth* during 1915–1918 and 1919–1922. $Pref_p$ is a set of prefecture fixed effects that controls for many locality characteristics. X_i includes the 13 variables on personal background. We also include 5-team fixed effects in some specifications in X_i to further account for their experience at the Whampoa.

To allow for possible changes in different prefectures before and after 1919, we can further control for the interactions between prefecture fixed effects and the post-1919 dummy ($Pref_p \times Post1919$). The cost of doing so is that only about half of the observations (358 individuals) still have variations. We present these results as additional evidence.

We also study county-level exposures where we compare individuals who had lived in the same county and control for county fixed effects when using county-level exposures. County-level exposures provide more precise information at the cost of having smaller cells in our comparison.

We report the standard errors clustered at the home county level in our baseline. In addition, we present standard errors two-way clustered at the prefecture and the year levels and implement a nonparametric permutation test by randomly assigning exposures, which does not rely on parametric assumptions about the error structure (Chetty, Looney and Kroft 2009).

Balance Tests. Our identification assumption is that conditional on the localities one had been to, $NYExposure_{p,1919-22}$ is close to being randomly assigned. This assumption is reasonable as individuals' relocation were likely to be primarily driven by economic opportunities and life events rather than the presence of the *New Youth*. To validate this assumption, we conduct balance tests with respect to all variables on personal background. In Columns (1)–(3) of Table 1, we divide individuals into three groups: (1) those who could access post-1919 *New Youth* in their county, (2) those who could access post-1919 *New Youth* in their prefecture but not their county, and (3) those who could not access post-1919 *New Youth* in their prefecture. Our analyses on prefecture-level exposures compare (1) and (2) against (3). As shown in Columns (4)–(5), the characteristics between the exposed and the rest are not significantly different once we control for prefecture fixed effects, which is not true if we fail to consider these locality fixed effects. Similarly, our analyses on county-level exposures compare (1) against (2) and (3). As shown in Columns (6)–(7), the characteristics between the exposed and the rest are not significantly different once we control for county fixed effects, which is also not true without county fixed effects. These results highlight the importance of controlling for locality fixed effects to account for the sorting of individuals.

4 Results

4.1 Ideology Exposure and CCP Membership

Main Results. Exposure to post-1919 *New Youth* has a large impact on the CCP membership. Columns (1)–(6) of Table 2 focus on prefecture-level exposure. After controlling for prefecture fixed effects in Column (1), the estimate for β in equation (1) is 0.109. As a contrast, pre-1919 *New Youth* exposure had little impact on the CCP membership (Column (2)), highlighting the importance of

ideology content for our finding. Column (3) compares the impacts of post- and pre-1919 *New Youth*. Columns (4) controls for personal characteristics available for all the sample (education background, birth year fixed effects, team fixed effects and number of CCP references). Column (5) shows that the estimate is similar when restricting the sample to those in Teams 1–4 on whom we have more information. Column (6) further controls for additional information on family background, demographic information and behavior traits. We use the coefficient (0.117) in Column (6) as our baseline estimate.

Columns (7)–(12) present the results for county-level exposure, following the same specifications in Columns (1)–(6) where we replace prefecture fixed effects with county fixed effects. The estimate for β increases to be around 0.172, reflecting that the impact of a more precise measure of exposure is larger.

As shown in Table 3, our estimates are similar if we further control for $Pref_p \times Post1919$, indicating that our finding is robust to considering possible changes before and after 1919 in different prefectures. As mentioned above, 358 individuals still have variations after including this set of controls, which explains the increase in standard errors compared with our baseline estimates.

Among the personal characteristics, having a CCP reference is associated with an increase in joining the CCP in most of the specifications. This is consistent with the importance of social networks in political participation. In contrast, the socioeconomic variables cannot predict CCP membership. We also examine the interaction effects of personal characteristics and post-1919 *New Youth* exposure (Appendix B.1). Overall, we do not find no strong heterogeneities except for weak complementarity between ideology exposure and social networks and that between ideology exposure and business family background. The relatively little impact of personal characteristics is likely because the CCP faced a great deal of risk at this stage, and it is difficult to imagine who would benefit more from joining such a revolution.

The impact of post-1919 *New Youth* exposure is robust to various ways of calculating standard errors (Appendix B.2). Moreover, we conduct a nonparametric permutation test by randomly assigning the treated sample 10,000 times. As reported in Figure 5, our estimate on post-1919 *New Youth* is significantly different from those coming from these random assignments (with a p-value smaller than 0.001). Since these results do not rely on parametric assumptions, they further support the relevance of post-1919 *New Youth* exposure.

A Closer Look at Possible Endogeneity Concerns. We have considered time-invariant locality characteristics and possible changes in the influences of locality characteristics before and after 1919 in our main analyses. Here, we discuss issues revolving around (1) possible endogenous entry of the *New Youth* and (2) possible relocation preferences of individuals toward the *New Youth*.

The finding that $NYExposure_{p,1915-18}$ has little impact on the CCP choice suggests that endogenous entry of the *New Youth* is not a critical concern (Table 2). As a further check, we separate the localities always with the *New Youth* and those that experienced entry and exit of the *New Youth*. As shown in Table 4, the estimates are similar in either case.

To check whether an individual's relocation preference could be a concern, we construct placebo relocations by assuming an individual's location were in the previous one or the next one in his life history. We use these placebo relocations to calculate placebo exposures to post-1919 *New Youth*. In principle, these placebo exposures capture one's potential preference toward certain locations. As shown in Table 5, these placebo exposures cannot explain our finding on $NYExposure_{p,1919-22}$, Thus, our main finding is unlikely to be explained by an individual's relocation in response to the availability of post-1919 *New Youth*.

Finally, we separate our comparison group into two subgroups: (1) those without access to post-1919 *New Youth* and (ii) those who had been in localities with post-1919 *New Youth* available but just missed the magazine. Group (ii)'s relocation is not driven by the presence of post-1919 *New Youth*, as the magazine was available but these individuals missed it due to their own life events. Table 6 presents the estimate when comparing the exposed group to group (ii). This impact, 0.12, is close to our baseline estimate. Again, this result demonstrates that our finding is not driven by sorting of individuals toward post-1919 *New Youth*.

Measurement Error. Measurement error is likely in our context. We conduct four sets of analyses at the locality and individual levels in Appendix B.3. First, our estimate is robust to dropping major metropolitan cities (Beijing, Shanghai, Guangzhou), implying that our findings are not driven by a few large cities. Second, we employ a continuous measure for $NYExposure_{p,1919-22}$ by counting the share of years being exposed (instead of a dummy variable) and find a similar pattern.

Our third and fourth examinations concern the precision of life events in the records. The third one shows that our finding is not dependent on the number of life events and robust to dropping those with few or many life events recorded. Finally, because some omitted the ending years of their life events, we make an assumption on the ending years based on the following events. This assumption

might matter if our coding systematically varies pre-post 1919. We show that our finding is robust to dropping the events in years close to 1919.

Gauging the Persuasion Rate. To better understand the magnitude of our estimates, we would like to calculate the persuasion rate following DellaVigna and Gentzkow (2010), where persuasion rate (P) is defined as follows:

$$P = \frac{y_T - y_C}{e_T - e_C} \frac{1}{1 - y_0} \tag{2}$$

While we know $y_T - y_C$ (i.e., the impact of being exposed) based on our estimates and can proxy y_0 by y_C (i.e., the probability without being exposed), we do not know the reading rate difference ($e_T - e_C$). The difference between the impacts of prefecture and county exposures provides some useful benchmark to gauge $e_T - e_C$. Specifically, it is reasonable to assume that the reading probability is close to zero if the *New Youth* is available outside a county (i.e., $e_C = 0$). The logic is as follows. Without considering the reading rates, the prefecture-level P is 0.117/(1-0.122)=13.3% and the county-level P is 0.172*/(1-0.092)=18.9%, which implies that the reading probability at the prefecture level should be 70.8% (13.3/18.9) that at the county level. This probability is close to that from assuming a zero reading probability if the *New Youth* is available outside a county: 365/(365+143)=71.9%.

As to e_T, considering the facts that our studied individuals had completed middle and secondary education and that the *New Youth* was the most popular periodical among the educated young, it may not be too strong to assume a high e_T when the *New Youth* is available within a county. Taken together, the impact of county-level exposure implies a lower-bound persuasion rate of 18.9%.

4.2 Interpreting Post-1919 *New Youth* Exposure

Motivated by historical narratives (Section 2.1), we use post-1919 *New Youth* exposure to measure Communist ideology exposure. This is not to deny the fact that these individuals also read other periodicals in this era. Moreover, various activist organizations emerged in the New Culture Movement, which may also contribute to the recruitment of the CCP. Here, we examine whether post-1919 *New Youth* could serve as a major channel for Communist ideology diffusion. To this end, we use archival information on pro-Communism periodicals and activist groups in this era to understand the importance of the *New Youth*.

The Network of Pro-Communism Periodicals. It is known that the *New Youth* inspired other pro-Communism periodicals and the editors of the *New Youth* helped co-founded several periodicals. Based on a series of 428-volume archives published as *Red Collections: Progressive Periodicals from 1915–1949*, we gather information on all editors and editorial offices for 19 pro-Communism periodicals that had ever existed during 1919–1922. We define a link between two periodicals as those sharing an editor or editorial office.

We plot the network among these pro-Communism periodicals in Figure 6. As shown, the *New Youth* is indeed the most central periodical in the network. Compared with the *New Youth*, the other periodicals were usually more short-lived (indicated by the size of the circles).

We also gather information of circulation locations of two other pro-Communism periodicals in the network: *Young China* and the *Guide Weekly*. We find that exposures to these additional periodicals can be considered a subset of exposure to the post-1919 *New Youth*: 47% of our studied cadets were exposed to the circulation of these two periodicals, out of which 99.4% overlapped with post-1919 *New Youth* exposure. When separating individuals to those exposed to the post-1919 *New Youth* only and those exposed to all three periodicals, we find similar estimates (Panel (a) of Table 7), supporting the importance of the post-1919 *New Youth* as a reasonable proxy for Communism diffusion.

Activist Groups and Communist Organizations. There existed various voluntary groups in the New Cultural Movement. We focus on the 28 of them that have been characterized as left-wing activist groups based on archival information on their reports and meeting minutes (Zhang et al. 1979, Xu 2013).[16] To check the relationship between these organizations and ideology exposure, we code an exposure measure to these organizations using the same way we code exposure to the *New Youth*. When examining the relationship between these exposures, we find a heavy overlapping pattern again: 31% of our studied individuals were exposed to those activist groups, out of which 99.1% overlapped with post-1919 *New Youth* exposure. When separating individuals to those exposed to the post-1919 *New Youth* only and those exposed to both post-1919 *New Youth* and these activist groups, we find an estimate of 0.11 for the former and an estimate of 0.18 for the latter (Panel (b) of Table 7). These results suggest some complementarity between the idea channel we focus on and possible influence of social groups. Nevertheless, exposure to the post-1919 *New Youth* has a large impact even in localities without these activist groups.

[16] Zhang et al. (1979) provides the data source. Xu (2013) studies why five of these 28 group became Communism groups.

In sum, we interpret the role of the post-1919 *New Youth* as a reasonable proxy for Communism diffusion in this era. It is possible that our studied individuals were also exposed to additional periodicals and organizations, considering which does not appear to change our main finding.

4.3 Future Political Outcomes

Do individuals mobilized by ideas behave differently in critical historical moments? We leverage the information on the future careers of the Whampoa cadets to shed light on this important yet difficult question. During the 1920s–1940s, the CCP and the KMT experienced various political struggles. In this process, many quitted their parties and scarified their lives. For instance, in 1927, the KMT under Chiang Kai-shek's direction worked out a plan to "clean the party" of Communist influence. As a result of the purge, the CCP lost over 90% of its members. The two civil wars (1927–1936 and 1945–1949) and the anti-Japanese war (1937–1946) were other important conflicts where both parties experienced a loss of members.

We compare four groups of individuals: CCP members with and without post-1919 *New Youth* exposure and KMT with and without post-1919 *New Youth* exposure. Table 8 presents the comparisons using KMT without post-1919 *New Youth* as the reference group, where we use seemingly unrelated regressions to allow for correlated error terms across the equations (for sacrifice and quitting). As shown, the shares of quitting or sacrifice are higher for the CCP than those for the KMT, reflecting the greater uncertainty faced by the CCP. Moreover, within the CCP, there appears to be a striking difference: Those who were exposed to post-1919 *New Youth* were 0.18 percentage points less likely to quit the party and 0.31 percentage points more likely to sacrifice their lives. Then, we take a closer look at different periods and find that our finding above is primarily driven by the period from 1927 to 1936, during which the CCP was much weaker and was under severe attack by the KMT. These results provide suggestive evidence that individuals mobilized by ideas can behave differently in challenging times.

To be sure, our finding does not imply that the future political outcomes are predetermined but suggests that ideology exposure can interact with other factors to influence personal choices in various situations. As emphasized by historians, most of the revolutionaries were gradually transformed to be committed Communists via the process of the revolution (Van de Ven 1992, Esherick 1995).

5 Conclusion

Ideas and their diffusion may have played a role in many social and political movements. One may even claim that “no ideas, no revolution" (Brinton 1938).[17] For instance, the American Revolution had ideological grounding centered on the struggle between power and liberty (Bailyn 1967). The French Revolution was motivated and shaped by a set of ideas encapsulated as liberty, equality, and fraternity. Due to the challenges of measuring and evaluating ideas, however, little empirical evidence exists to pinpoint the specific impact of ideas. In this study, we focus on the ideas of Communism, which had profound and global impacts yet has not been much studied by social scientists. We measure Communism exposure by combining information on the supply of ideas and that on the life history of a group of important individuals. We demonstrate the importance of ideology exposure in shaping the political choice of individuals who would jointly determine the fate of modern China. Moreover, the influence of ideas may even have affected their future life and death outcomes.

To be sure, ideology exposure is not the only determinant of one’s political choice. To the contrary, we also find that the political identity of the references is another strong predictor of an individual’s own political identity, suggesting the influence of social networks. At the same time, the association between one’s socioeconomic background and political identity is minimal in our context. The particular relevance of ideology, in contrast with social economic status, reflects the uncertainty faced by the CCP during our studied period. These findings are likely to be relevant for movements that face high risk. While it is generally difficult to study individual participation in high-risk social movements, our study offers an approach to depict the profile of individual participants and understand their political choices. We believe that this approach can be applied to other settings where systematic information exists on a selected group of relevant individuals is available.

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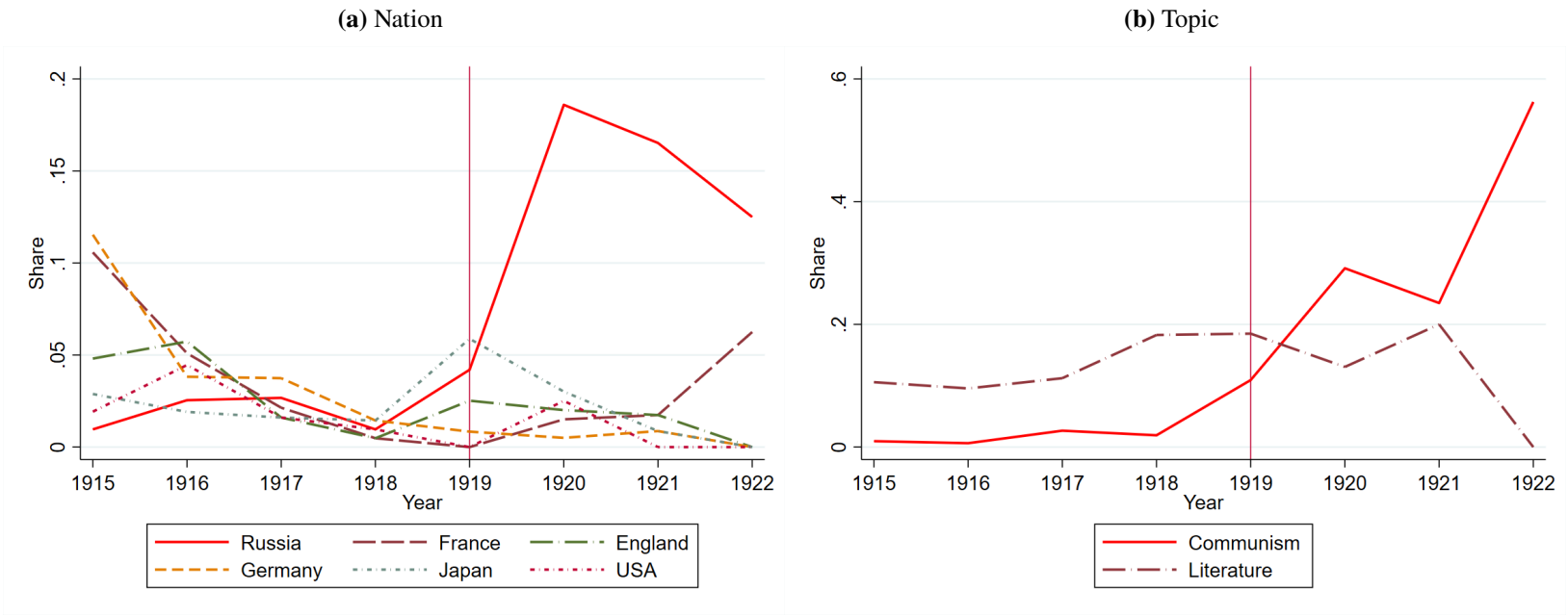
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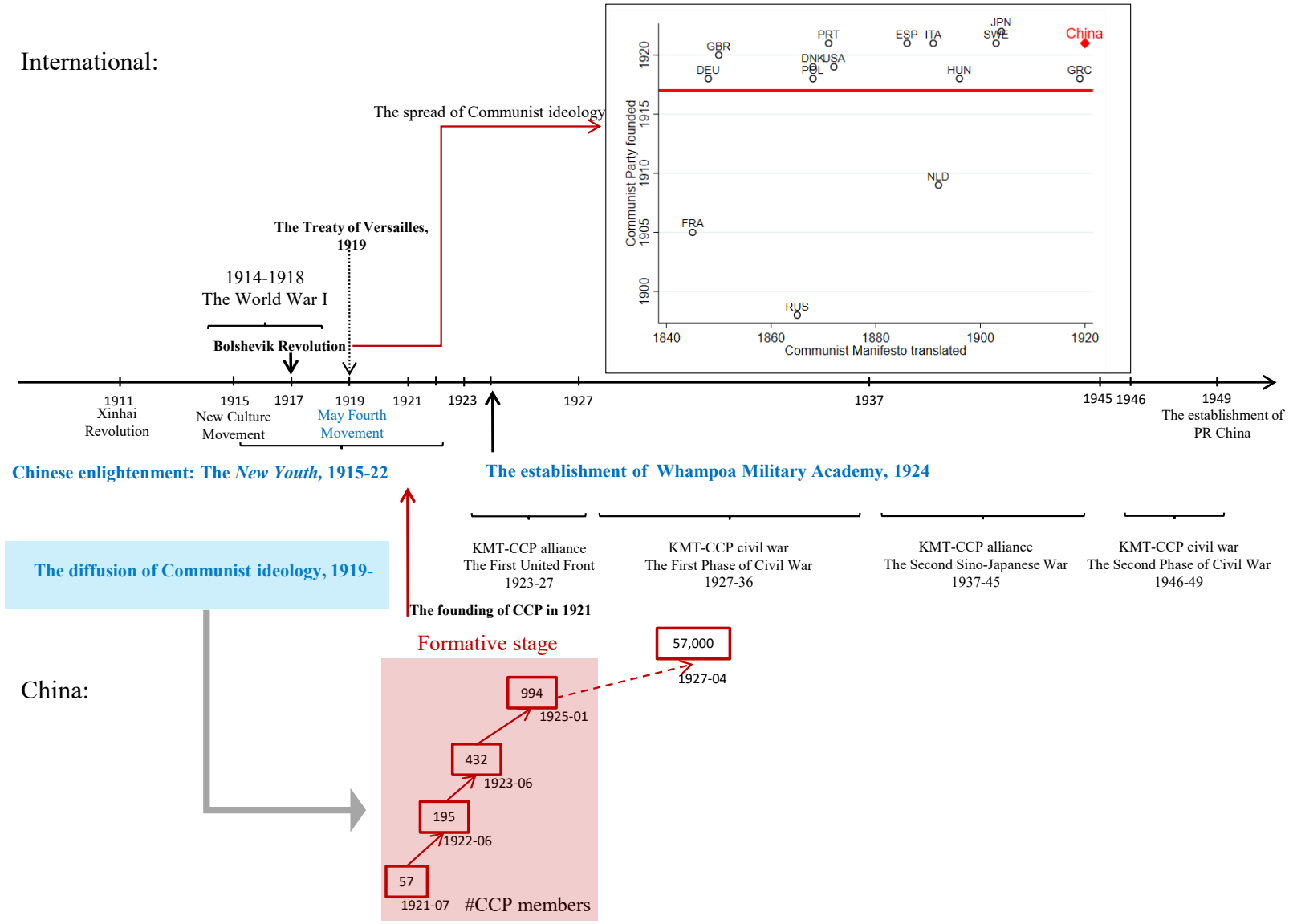
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Figure 1. Ideological Transition of the *New Youth*



Note. This figure shows the ideological transition of the *New Youth* around 1919–20. In Panel (b), "Communism" topic includes phrases "Marx", "Lenin", "socialism", "communism", "Soviet", "Bolshevism", "revolution", "labor", "worker", "strike", and "proletariat". "Literature" includes all novels, dramas, literary critics, essays on linguistics and philology, and book-reading notes. All short poems are deleted when calculating the share.

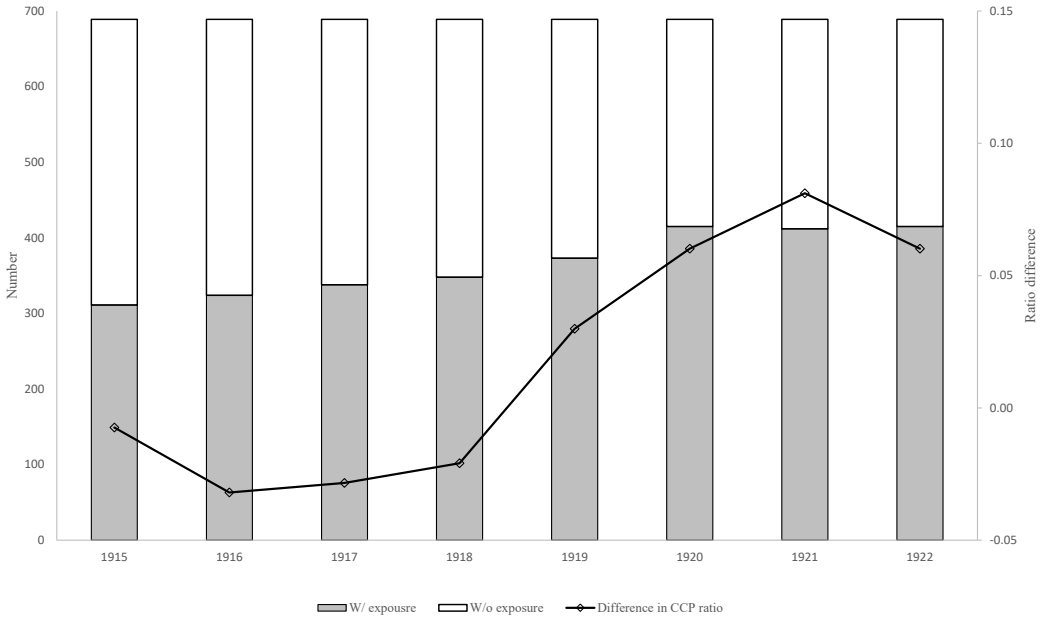
Figure 2. Key Events (1911–1949)



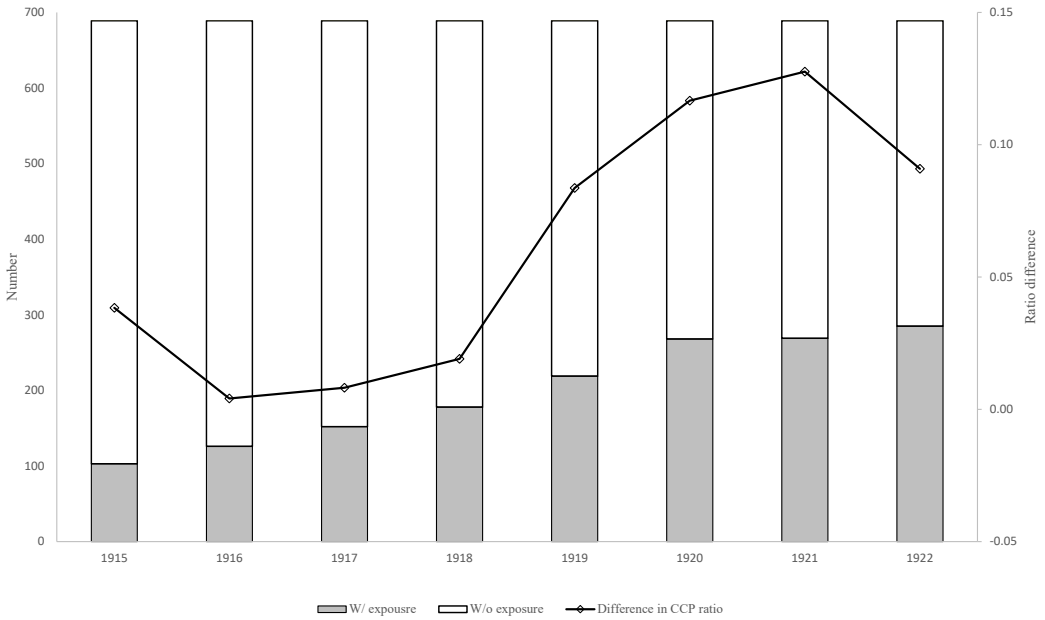
Note. Our analyses focus on how the exposure to the *New Youth* (1919–22) affected (1) the Whampoa cadets' choice to become a CCP member in CCP's formative stage (1921–27) and (2) the outcomes of these cadets during 1920s-49.

Figure 3. Raw Data I: Exposure to the *New Youth* and CCP Membership

(a) Prefecture-level



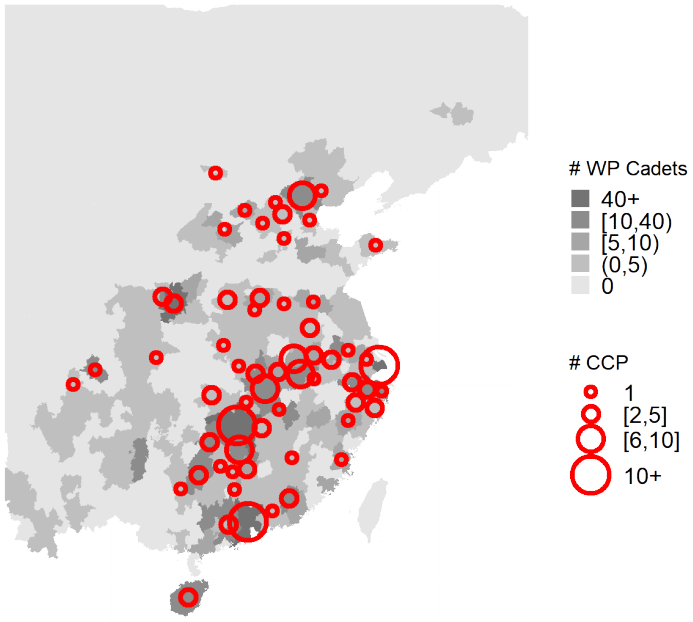
(b) County-level



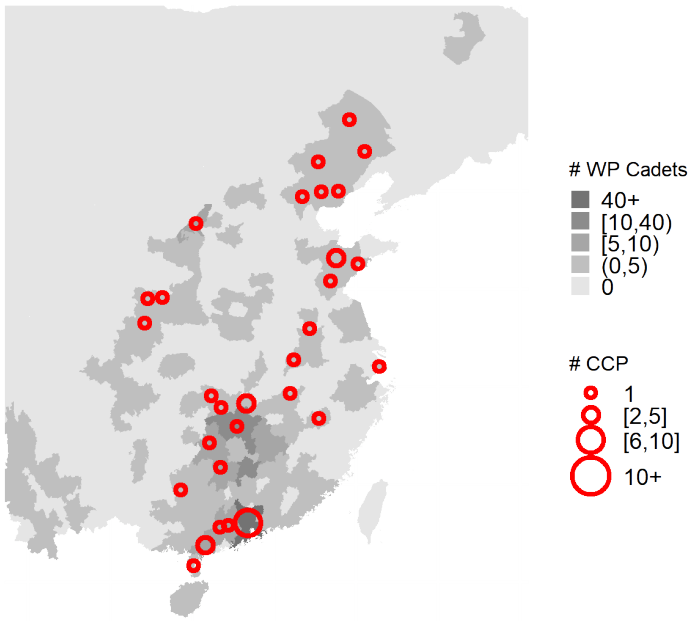
Note. The shaded and unshaded area in the bar represent the number of cadets with and without *New Youth* exposure in each year respectively. The solid line with diamond marker represents the difference in the CCP ratios between the cadets with *New Youth* exposure and those without. As shown, the differences became positive after 1919.

Figure 4. Raw Data II: Post-19 *New Youth* Exposure and CCP Membership

(a) CCP w/ Post-19 *New Youth* Exposure



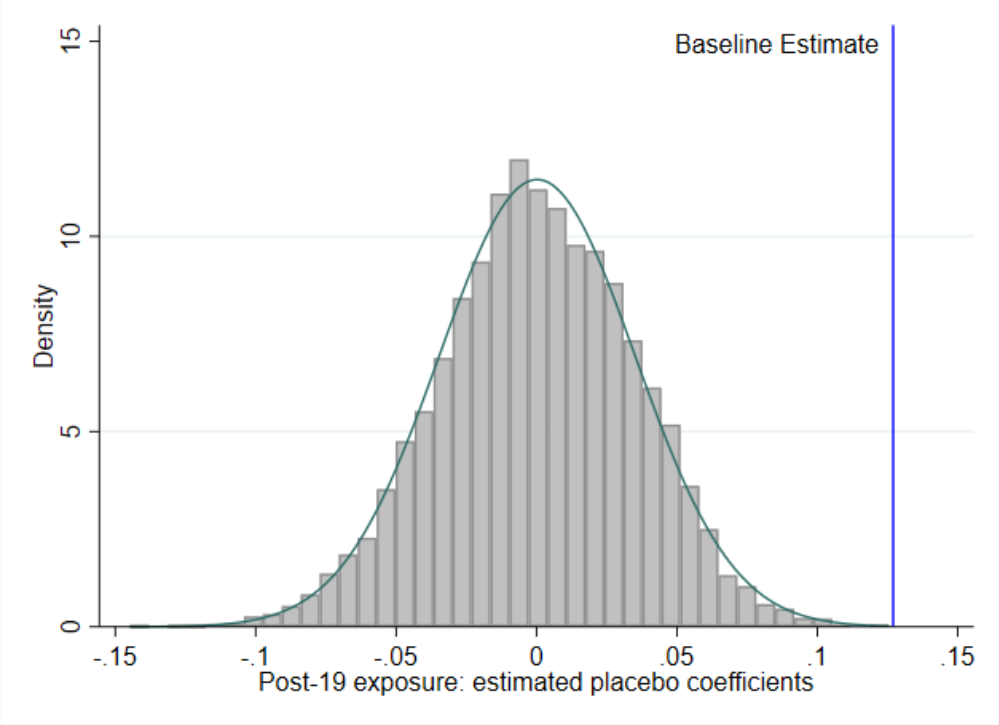
(b) CCP w/o Post-19 *New Youth* Exposure



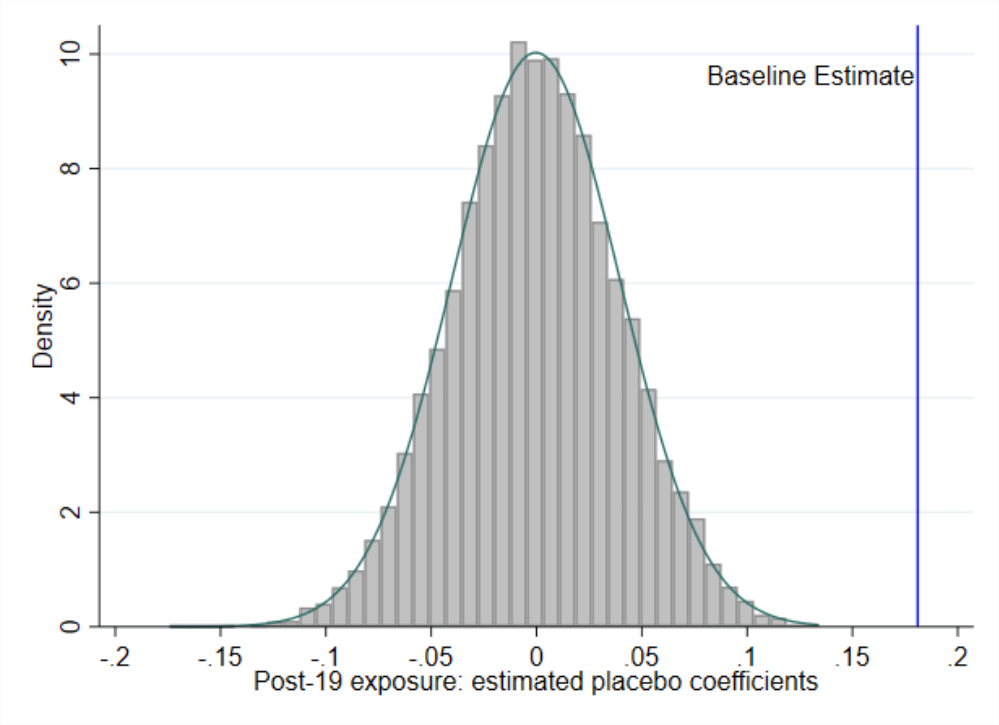
Note. These figures plot the number of CCP members and the number of cadets across for the groups with or without post-19 New Youth exposure. On average, the probabilities of being a CCP member are 20.5% in Panel (a) and 12% in Panel (b).

Figure 5. Distribution of Placebo Estimates

(a) Exposure Defined at Prefecture Level

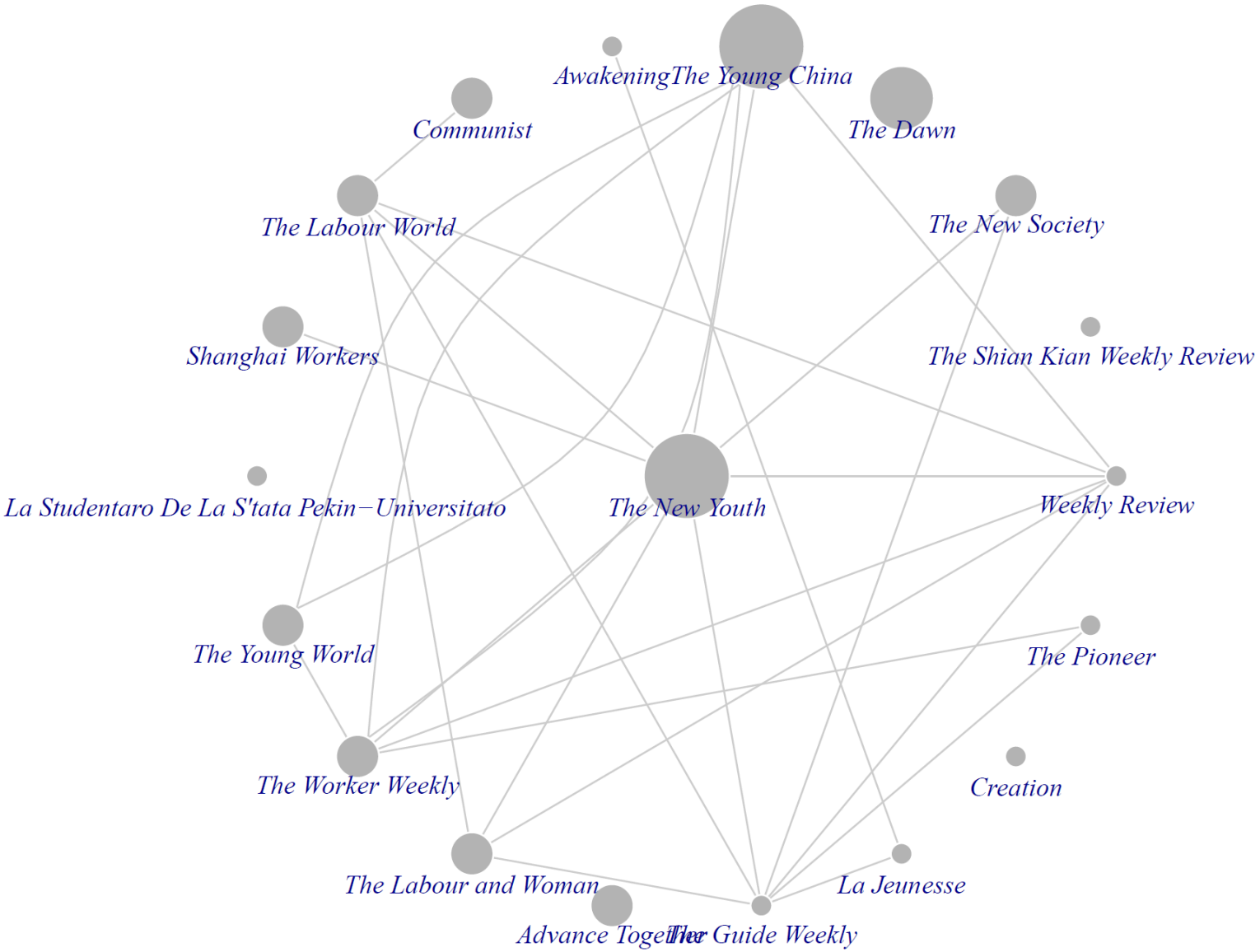


(b) Exposure Defined at County Level



Note. These figures plot the estimates from randomly assigned exposures. They show that our estimates are significantly different from these randomly assigned treatment effects.

Figure 6. The Network of Pro-Communism Periodicals



Note. This figure plots the links among 19 Pro-Communism periodicals that had ever existed during 1919–1922. A link means that two periodicals share editor or the editorial office. The size of the circles indicate the number of circulation years.

Table 1. Balance Tests

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	New Youth exposure, 1919-22			Differences			
Prefecture-level exposure	=1		=0	(1)+(2) vs. (3)		(1) vs. (2)+(3)	
County-level exposure	=1	=0		w/o Pref. FE	**w/ Pref. FE**	w/o county FE	**w/ county FE**
Sample: All							
Personal characteristics I, N=	365	143	181				
Birth year	1900.5	1901.2	1900.7	0.009	0.297	-0.445**	0.223
	(2.889)	(2.802)	(2.911)	[0.260]	[0.457]	[0.218]	[0.491]
Education: Middle school and above	0.981	0.930	0.928	0.038*	0.012	0.052***	0.001
	(0.137)	(0.256)	(0.259)	[0.023]	[0.037]	[0.016]	[0.042]
Education: vocational	0.633	0.615	0.541	0.087	-0.055	0.059	-0.020
	(0.483)	(0.488)	(0.500)	[0.055]	[0.065]	[0.051]	[0.108]
Education: college	0.164	0.035	0.050	0.078***	0.000	0.121***	-0.032
	(0.371)	(0.184)	(0.218)	[0.025]	[0.035]	[0.024]	[0.050]
Networks: # CCP references	0.263	0.049	0.116	0.087*	0.069	0.177***	0.090
	(0.608)	(0.247)	(0.570)	[0.051]	[0.084]	[0.042]	[0.113]
Sample: Teams 1-4:							
Personal characteristics II, N=	314	82	131				
Family: gentry	0.280	0.188	0.214	0.047	0.042	0.077**	0.132
	(0.450)	(0.393)	(0.412)	[0.043]	[0.082]	[0.039]	[0.118]
Family: business	0.303	0.294	0.328	-0.027	0.007	-0.012	-0.058
	(0.460)	(0.458)	(0.471)	[0.049]	[0.082]	[0.041]	[0.139]
Family economic status (1-3)	1.675	1.518	1.611	0.031	0.102	0.101**	0.051
	(0.521)	(0.569)	(0.549)	[0.060]	[0.098]	[0.050]	[0.148]
# Siblings	3.274	3.624	3.489	-0.140	0.182	-0.268	-0.292
	(2.258)	(2.502)	(2.761)	[0.254]	[0.558]	[0.216]	[0.879]
Married	0.506	0.471	0.679	-0.181***	-0.141	-0.091*	0.005
	(0.501)	(0.502)	(0.469)	[0.051]	[0.092]	[0.048]	[0.146]
Having children	0.146	0.129	0.122	0.021	0.001	0.021	0.073
	(0.354)	(0.338)	(0.329)	[0.035]	[0.070]	[0.031]	[0.102]
Religious	0.099	0.129	0.122	-0.017	0.045	-0.026	-0.006
	(0.299)	(0.338)	(0.329)	[0.035]	[0.047]	[0.029]	[0.073]
Smoking and drinking	0.035	0.106	0.053	-0.003	0.028	-0.039*	-0.100
	(0.184)	(0.310)	(0.226)	[0.021]	[0.032]	[0.022]	[0.066]

Note. Standard deviations are reported in the parentheses in Columns (1)–(3), and standard errors clustered at the home county level in the bracket in Columns (4)–(7).

Table 2. Baseline Estimates: Impact of Post-19 *NewYouth* Exposure on CCP Membership
Dependent Variable: CCP=1/0

New Youth Exposure defined at	Prefecture level							County level					
	(1)	(2)	(3)	(4)	(5)	(6)		(7)	(8)	(9)	(10)	(11)	(12)
					Teams 1-4							Teams 1-4	
New Youth Exposure, 1919-22	0.109**		0.128**	0.127**	0.127**	0.117**	0.153**		0.152**	0.181**	0.162**	0.172**	0.172**
	(0.048)		(0.050)	(0.052)	(0.058)	(0.056)	(0.077)		(0.077)	(0.073)	(0.081)	(0.082)	(0.082)
New Youth Exposure, 1915-18		-0.047	-0.081*	-0.055	-0.091	-0.094		-0.044	-0.038	-0.006	-0.103	-0.104	-0.104
		(0.046)	(0.048)	(0.051)	(0.066)	(0.068)		(0.099)	(0.097)	(0.095)	(0.115)	(0.116)	(0.116)
Education: vocational				0.009	0.022	0.018				-0.066	-0.074	-0.078	0.079
				(0.046)	(0.047)	(0.047)				(0.067)	(0.075)	(0.076)	(0.092)
Education: college				-0.028	-0.003	-0.002				0.041	0.003	-0.005	-0.078
				(0.062)	(0.073)	(0.075)				(0.138)	(0.159)	(0.179)	(0.076)
#CCP references				0.181***	0.171***	0.173***				0.179**	0.076	0.079	-0.005
				(0.048)	(0.050)	(0.049)				(0.078)	(0.089)	(0.092)	(0.179)
Family: gentry						-0.015						-0.030	-0.030
						(0.052)						(0.092)	(0.092)
Family: business						0.021						0.004	0.004
						(0.052)						(0.090)	(0.090)
Family economic status (1-3)						0.022						-0.011	-0.011
						(0.039)						(0.059)	(0.059)
#Siblings						-0.001						-0.000	-0.000
						(0.007)						(0.011)	(0.011)
Married						-0.072*						-0.022	-0.022
						(0.043)						(0.078)	(0.078)
Having children						-0.012						-0.076	-0.076
						(0.064)						(0.101)	(0.101)
Religious						-0.030						-0.069	-0.069
						(0.051)						(0.090)	(0.090)
Smoking and drinking						0.042						0.042	0.042
						(0.087)						(0.143)	(0.143)
Prefecture FE	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y
County FE								Y	Y	Y	Y	Y	Y
Team FE				Y	Y	Y					Y	Y	Y
Birth year FE				Y	Y	Y					Y	Y	Y
Observations	689	689	689	689	530	530		689	689	689	689	530	530
R-squared	0.386	0.381	0.389	0.443	0.534	0.542		0.560	0.552	0.560	0.603	0.747	0.750

Note. Columns (1)–(4) and (7)–(10) include all cadets whereas Columns (5)–(6) and (11)–(12) focus on Team 1–4 on whom we have more information. Standard errors in parentheses are clustered at the home county level; *** p<0.01, ** p<0.05, * p<0.1

Table 3. Controlling for Prefecture FEs × Post 1919
Dependent Variable: CCP=1/0

NY Exposure defined at	Prefecture level		County level	
	(1)	(2)	(3)	(4)
NY Exposure, 1919-22	0.126**	0.125**	0.150*	0.181**
	(0.054)	(0.057)	(0.085)	(0.083)
NY Exposure, 1915-18	-0.081	-0.053	-0.043	-0.006
	(0.050)	(0.053)	(0.101)	(0.100)
		(0.047)		(0.072)
		(0.063)		(0.144)
		(0.049)		(0.090)
Prefecture FE	Y	Y		
County FE			Y	Y
Prefecture FE * 1919-22	Y	Y	Y	Y
Personal characteristics I	Y	Y	Y	Y
Team FE		Y		Y
Observations	689	689	689	689
R-squared	0.391	0.445	0.569	0.611

Note. After controlling for Pref FE*Post, the variation stems from 358 individuals. Standard errors in parentheses are clustered at the home county level; *** p<0.01, ** p<0.05, * p<0.1

Table 4. Always-New Youth vs. Not-always-New Youth
Dependent Variable: CCP=1/0

	(1)	(2)	(3)
Always-NY exposure, 1919-22	0.109**	0.126**	0.117**
	(0.049)	(0.050)	(0.056)
Not-always-NY exposure, 1919-22	0.121*	0.125*	0.151**
	(0.073)	(0.073)	(0.071)
NY exposure, 1915-1918		-0.078*	-0.049
		(0.047)	(0.050)
Team FE			Y
Birth year FE			Y
Personal characteristics I			Y
Observations	689	689	689
R-squared	0.388	0.390	0.445

Note. This table separates the exposures to those localities always with the *New Youth* and those with the *New Youth* entry and exit. Standard errors in parentheses are clustered at the home county level; *** p<0.01, ** p<0.05, * p<0.1

Table 5. Impacts of Placebo Exposures: Assuming One Were in His Previous or Next Locations
Dependent Variable: CCP=1/0

	Relocation to the next location				Relocation to the previous location			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
				Teams 1-4				Teams 1-4
Placebo New Youth Exposure, 1919-22	0.041		0.035	0.041	0.098		0.065	0.018
	(0.046)		(0.045)	(0.050)	(0.068)		(0.060)	(0.064)
Placebo New Youth Exposure, 1915-18		0.033	0.024	0.010		0.128*	0.108*	0.062
		(0.039)	(0.038)	(0.049)		(0.067)	(0.061)	(0.063)
Prefecture FE	Y	Y	Y	Y	Y	Y	Y	Y
Team FE	Y	Y	Y	Y	Y	Y	Y	Y
Personal characteristics I	Y	Y	Y	Y	Y	Y	Y	Y
Personal characteristics II				Y				Y
Observations	689	689	689	530	689	689	689	530
R-squared	0.456	0.455	0.457	0.558	0.458	0.460	0.461	0.558

Note. Columns (1)–(4) assume one were located in the previous prefecture according to his life event records whereas Columns (5)–(8) assume one were located in the next prefecture.
Personal characteristics I include birth year fixed effects, vocational education, college, and number of CCP referees; Personal characteristics II include family backgrounds (gentry, business), family economic status (1-3), number of siblings, marriage status, dummy indicating whether having child, religious belief, and smoking and drinking habit.
Standard errors in parentheses are clustered at the home county level; *** p<0.01, ** p<0.05, * p<0.1.

Table 6. Comparing with Those Who Just Missed Post-1919
Dependent Variable: CCP=1/0

	(1)	(2)	(3)	(4)
Just who miss post-1919 New Youth	0.024	0.006	0.026	0.016
	(0.067)	(0.067)	(0.072)	(0.071)
New Youth exposure, 1919-22	0.123*	0.131**	0.132*	0.136**
	(0.067)	(0.066)	(0.068)	(0.068)
New Youth exposure, 1915-18		-0.081*		-0.053
		(0.049)		(0.051)
New Youth exposure, 1919-22 vs. Just-miss	0.100*	0.125***	0.105**	0.120**
	(0.051)	(0.055)	(0.057)	(0.059)
Prefecture FE	Y	Y	Y	Y
Team FE			Y	Y
Personal characteristics I			Y	Y
Observations	689	689	689	689
R-squared	0.386	0.389	0.442	0.443

Note. This table compares the exposed and those who had been to prefectures with post-1919 *New Youth* but missed it due to his own life events. Personal characteristics I include birth year fixed effects, vocational education, college, and number of CCP referees. Standard errors in parentheses are clustered at the home county level; *** p<0.01, ** p<0.05, * p<0.1.

Table 7. Other Pro-Communism Periodicals and Activist Groups
Dependent Variable: CCP=1/0

(a) NY exposure vs. Two other Communist periodicals

	(1)	(2)	(3)
NY, 1919-22 + no other two Communist mag.	0.100*	0.116*	0.142**
	(0.059)	(0.061)	(0.063)
NY, 1919-22 + other two Communist mag.	0.113**	0.134**	0.120**
	(0.052)	(0.055)	(0.057)
Prefecture FE	Y	Y	Y
NY Exposure, 1915-18		Y	Y
Team FE			Y
Personal characteristics I			Y
Observations	689	689	689
R-squared	0.386	0.389	0.443

(b) NY exposure vs. Activist groups

	(1)	(2)	(3)
NY, 1919-22 + no Activist org.	0.086*	0.103**	0.110**
	(0.047)	(0.049)	(0.051)
NY, 1919-22 + Activist org.	0.169**	0.204***	0.178**
	(0.075)	(0.076)	(0.082)
NY Exposure, 1915-18	Y	Y	Y
Prefecture FE		Y	Y
Team FE			Y
Personal characteristics I			Y
Observations	689	689	689
R-squared	0.388	0.392	0.444

Note. This table compares the exposure to the Post-1919 *New Youth* and those to other Communist magazines and activist groups.
Personal characteristics I include birth year fixed effects, vocational education, college, and number of CCP referees. Standard errors in parentheses are clustered at the home county level; *** p<0.01, ** p<0.05, * p<0.1.

Table 8. Impact on Future Political Outcomes

	(1) 1924-1949		(2) 1924-1949		(3) 1927-1936	
	(1.1) Quit	(1.2) Sacrifice	(2.1) Quit	(2.2) Sacrifice	(3.1) Quit	(3.2) Sacrifice
(1) KMT with NY exposure	0.016	0.152***	0.029	0.147***	-0.006	0.055
	(0.045)	(0.052)	(0.046)	(0.053)	(0.025)	(0.038)
(2) CCP without NY exposure	0.355***	0.303***	0.353***	0.304***	0.580***	0.249***
	(0.092)	(0.106)	(0.092)	(0.106)	(0.053)	(0.081)
(3) CCP with NY exposure	0.109*	0.554***	0.120**	0.550***	0.327***	0.413***
	(0.056)	(0.065)	(0.057)	(0.065)	(0.033)	(0.049)
(3)-(2)	-0.245***	0.251**	-0.233***	0.246**	-0.253***	0.164*
	(0.100)	(0.115)	(0.100)	(0.115)	(0.057)	(0.087)
NY Exposure, 1915-18			Y	Y	Y	Y
Prefecture FE	Y	Y	Y	Y	Y	Y
Team FE	Y	Y	Y	Y	Y	Y
Personal characteristics I	Y	Y	Y	Y	Y	Y
Observations	689	689	689	689	594	594
R-squared	0.354	0.375	0.356	0.376	0.588	0.417

Note. This table compares the future outcomes of our studied individuals. The reference group is the KMT without post-1919 New Youth exposure.
Personal characteristics I include birth year fixed effects, vocational education, college, and number of CCP referees. Standard errors in parentheses are clustered at the home county level; *** p<0.01, ** p<0.05, * p<0.1.

Online Appendix

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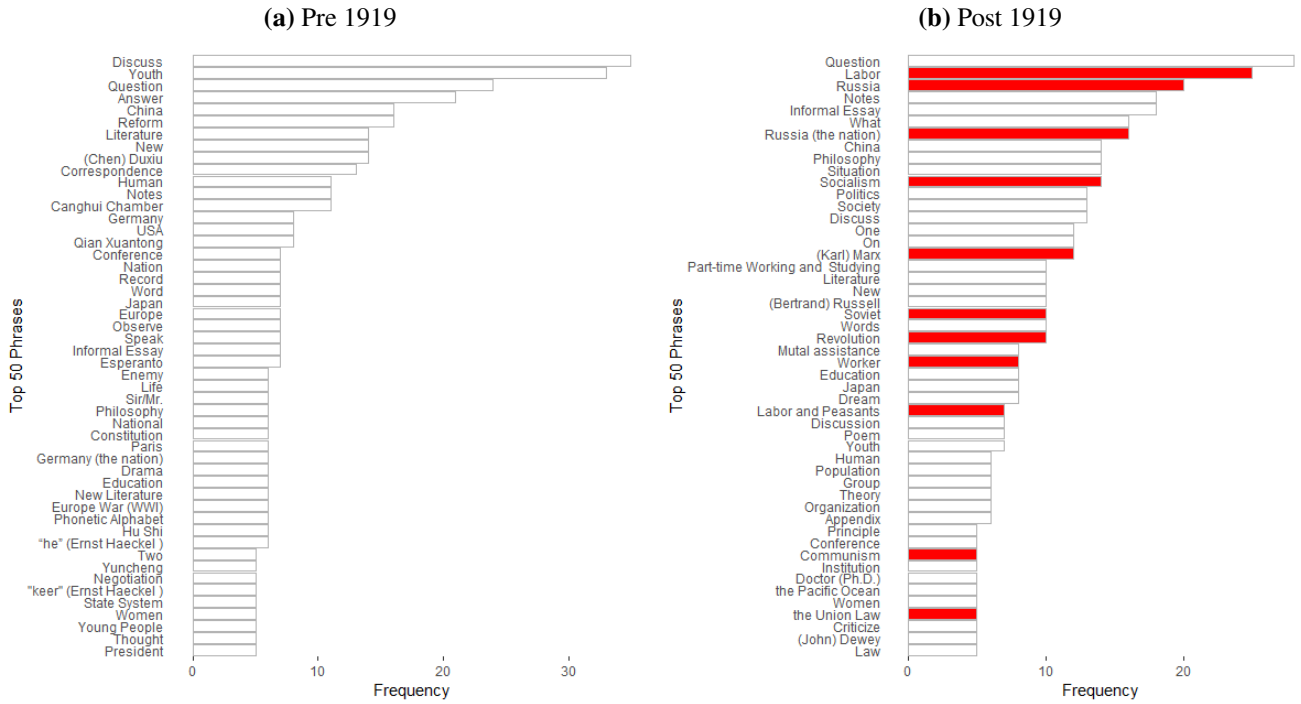
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A Background and Data: More Results

A.1 Ideological Change of the *New Youth*: Top words

Figure A.1 plots the top words in the titles of *New Youth* articles. Panel (a) focuses on the pre-1919 articles and panel (b) on post-1919 articles. As shown in Panel (b), after 1919, quite a few words related to Communism stood out in the titles of the publications, such as labor, Russia and socialism.

Figure A.1. Top words in the titles pre-post 1919



A.2 Summary Statistics and Data Sources

Table A.2. Data Sources and Summary Statistics

Variables	Data source	Observations	Mean	SD	Min	Max
CCP membership	A	689	0.171	0.377	0	1
Quit	A	550	0.198	0.399	0	1
Sacrifice	A	550	0.302	0.459	0	1
NY exposure, post-19	A, B	689	0.737	0.440	0	1
NY exposure, pre-19	A, B	689	0.552	0.498	0	1
NY exposure, post-19 (County)	A, B	689	0.530	0.499	0	1
NY exposure, pre-19 (County)	A, B	689	0.293	0.456	0	1
Just miss	A, B	689	0.125	0.331	0	1
EM exposure, post-19	A, C	689	0.768	0.423	0	1
EM exposure, pre-19	A, C	689	0.562	0.497	0	1
Other Communist magazine	A, D	689	0.466	0.499	0	1
Communist organizations	A, E	689	0.376	0.485	0	1
Team	A	689	3.274	1.736	1	6
Birth year	A, F	689	1900.7	2.888	1886	1909
Education: middle school and above	A	689	0.956	0.204	0	1
Education: vocational	A	689	0.605	0.489	0	1
Education: college	A	689	0.107	0.310	0	1
# CCP references	A					
		689	0.180	0.549	0	5
Groups 1-4 only		689	3.274	1.736	1	6
Family: gentry	A, G	530	0.249	0.433	0	1
Family: business	A, G	530	0.308	0.462	0	1
Family economic status (1-3)	A, G	530	1.634	0.538	1	3
# Siblings	A, G	530	3.383	2.430	0	16
Married	A, G	530	0.543	0.499	0	1
Having children	A, G	530	0.138	0.345	0	1
Religious	A, G	530	0.109	0.312	0	1
Smoking and drinking	A, G	530	0.051	0.220	0	1

Notes: A, Chen (2017); B, the New Youth; C, ; D, ; E, ; F, ; G, Survey for Teams 1-4.

A.3 The Whampoa Cadets: A Biographical Dataset

We use two related sources of data to construct a biographical dataset on the first cohort of Whampoa cadets. First, Chen (2017) compiled the biographies for all 698 cadets. Second, the Whompoa conducted a detailed survey for the 530 cadets for those who were directly recruited (Teams 1-4). Figure A.3(I) presents an example of the admission questionnaires.

Figure A.3. I. The Admission Questionnaire of Xu Xiangqian

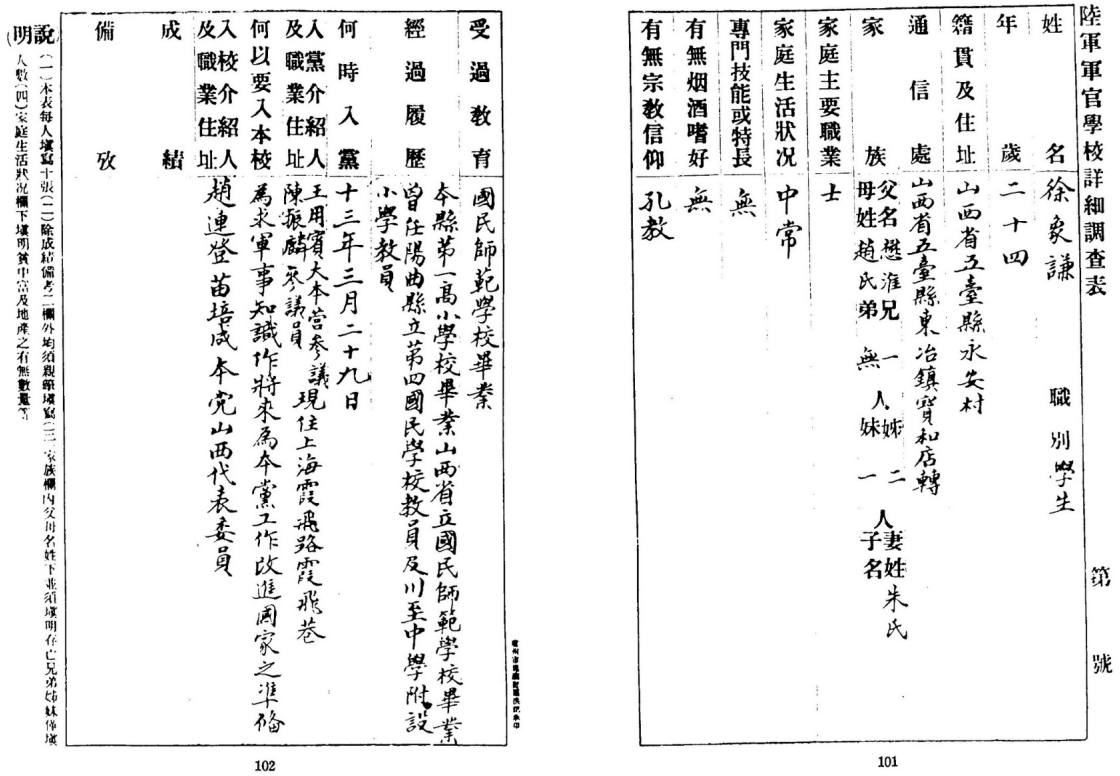


Figure A.3(III) and (IV) provide an example to illustrate our coding process, where we explain in order below.

i. CCP Membership and Other Political Outcomes. Based on the cadet's biography, we define three dummy variables indicating the cadet's CCP membership, whether the cadet quitted his party, and whether the cadet died during the war, respectively. The biography of Xu Xiangqian shows that he joined the CCP in 1927, and became the one of the ten marshals of the People's Liberation Army in 1955. Then, for Xu Xiangqian, CCP membership=1, Quitting=0, and Sacrifice=0. We highlight the related coding in red in Figure A.3(II).

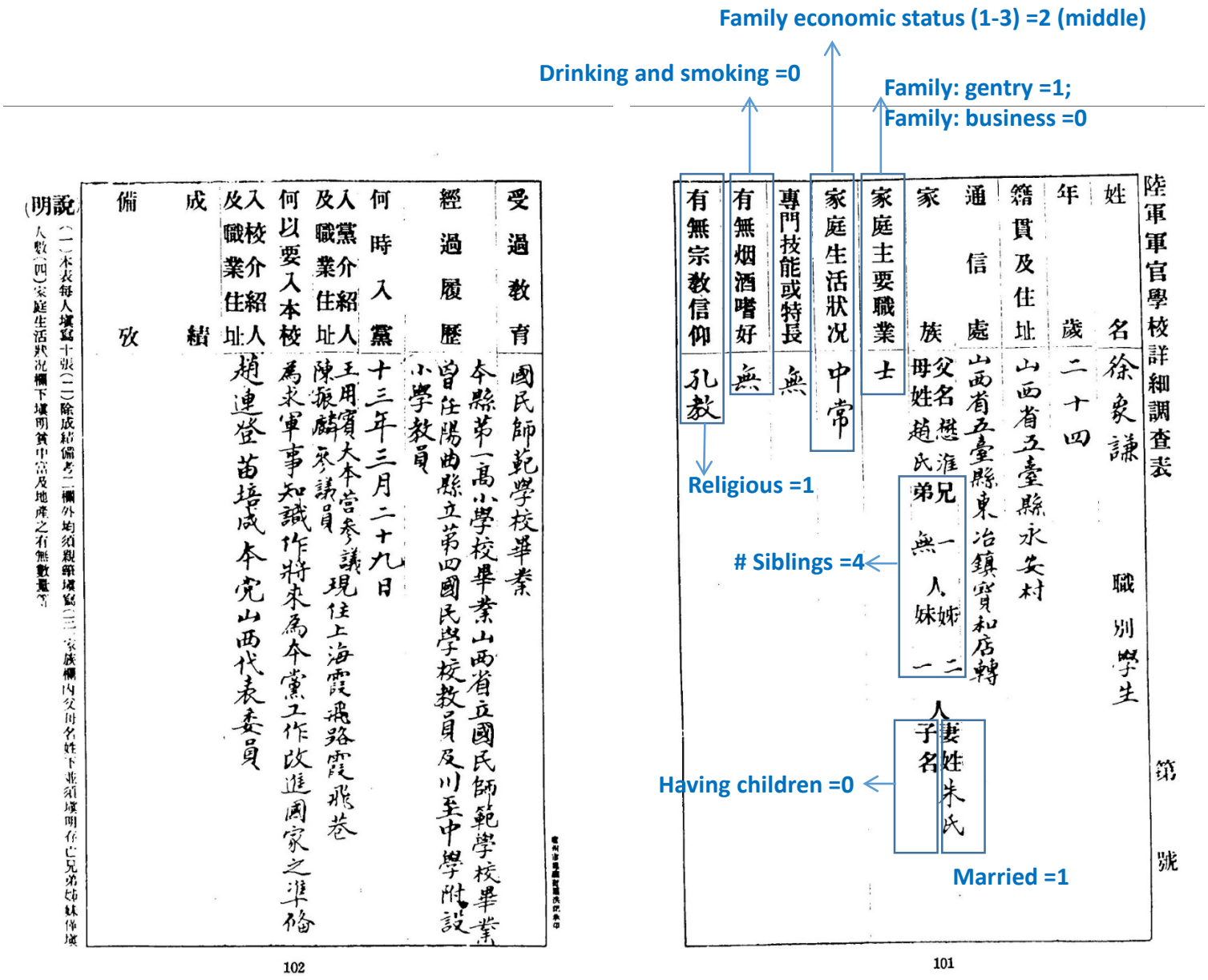
Figure A.3. III. An Example of Coding Based on the Biography



ii. Personal Characteristics I. We construct four sets of variables to measure the basic personal characteristics from the cadets' biography as shown in Figure A.3(II). First, we code the cadet's birth year. Second, based on the description of the cadet's education experiences, we construct three dummies, indicating whether the cadet received middle school education or above, vocational education, and college education, respectively. Third, we list the references for the cadet's application to the Whampoa, check the party status of the references, and then calculate how many CCP references the cadet had. Fourth, we code which team the cadet was assigned to. The related coding for Xu Xiangqian is highlighted in blue in Figure A.3(II).

iii. Personal Characteristics III. Based on the survey conducted by Whampoa, we construct another three sets of variables to further measure individuals' personal characteristics. First, we code the cadets' family background. Specifically, we use two dummies to measure whether the cadet's family had education tradition, and whether his family run some business, and one category variable to measure his family economic status, ranged from 1 (poor), 2 (middle), and 3 (rich). Second, we collect more demographic information, including the number of siblings, whether the cadet married, and whether the cadet had children. Third, we use two dummies to measure the cadet's religion and behavior traits: whether the cadet believed in some religions, and whether the cadet had drinking and smoking habit. The related coding for Xu Xiangqian is highlighted in Figure A.3(III).

Figure A.3. III. An Example of Coding Based on the Survey

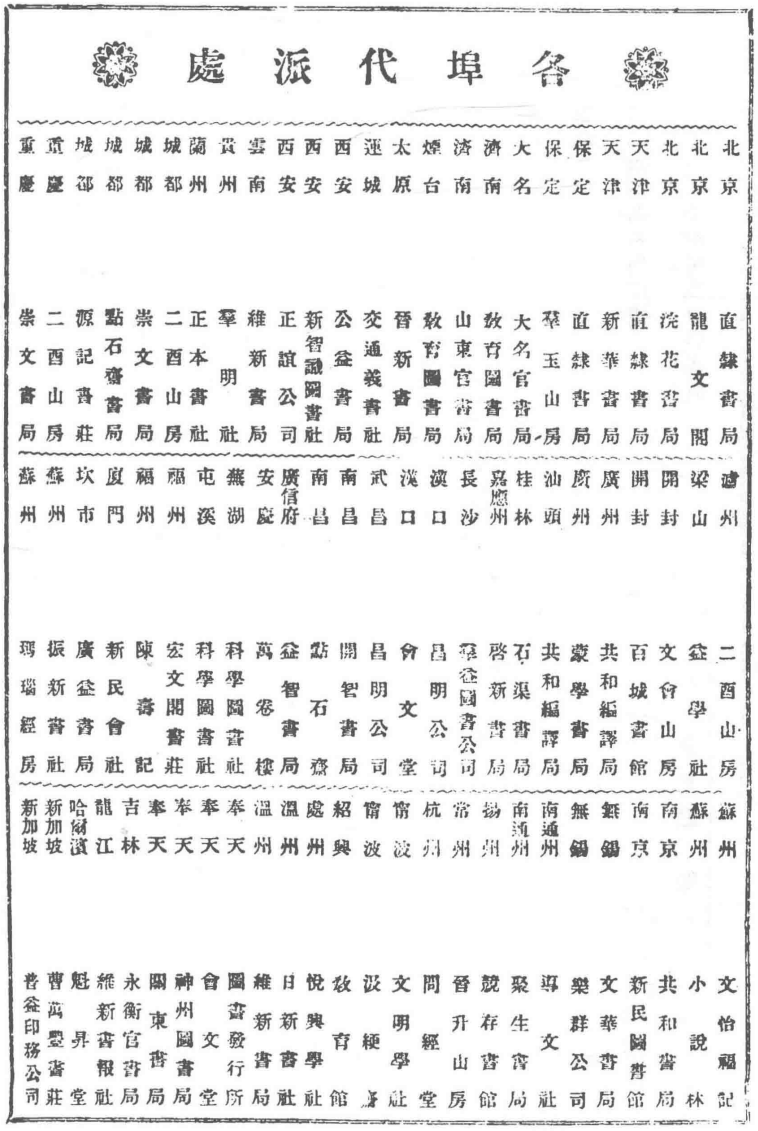


A.4 Coding Life History and Exposure to the *New Youth*

We take three steps to define and code whether one cadet was exposed to the *New Youth* and Communist Ideology explained below.

Step 1. Coding the Circulation of the *New Youth* Over Time The *New Youth* magazine listed its circulation locations in each volume. Figure A.4(I) provides an example.

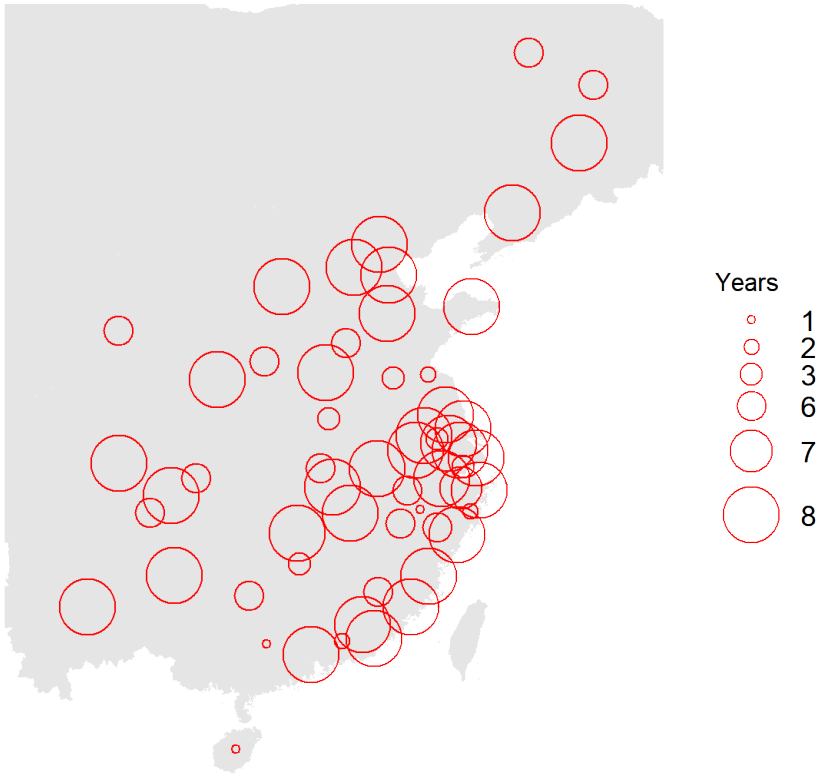
Figure A.4. I. An Example of the Circulation of the New Youth


各埠代派處

北京	北京	天津	保定	大名	濟南	濟南	煙台	太原	運城	西安	西安	雲南	貴州	蘭州	成都	成都	成都	重慶	重慶	蘇州	蘇州	蘇州	蘇州	蘇州	蘇州	蘇州	蘇州	蘇州	蘇州	蘇州	蘇州	蘇州	蘇州	蘇州	蘇州	蘇州
直隸書局	直隸書局	新華書局	直隸書局	大名官書局-房	教育圖書局	山東官書局	教育圖書局	晉新書局	交通叢書社	公益書局	新智識圖書社	正誼公司	華明社	維新書局	正本書社	二酉山房	崇文書局	二酉山房	源記書莊	點石齋書局	崇文書局	二酉山房	正本書社	科學圖書社	萬卷樓	益智書局	點石齋	開智書局	昌明公司	會文堂	昌明公司	華益圖書公司	啓新書局	石渠書局	共和編譯局	叢學書局	共和編譯局	百城書館	文會山房	益學社	二酉山房
龍文閣	梁山	開封	開封	玉山-房	嘉應州	長沙	漢口	武昌	南昌	南昌	廣信府	安慶	蕪湖	屯溪	福州	福州	廈門	坎市	莊	齋書局	福州	州	閩書莊	圖書社	溫州	處州	紹興	寧波	杭州	常州	錫山	南通州	南通州	無錫	南京	南京	南京	蘇州	蘇州
小說林	文華書局	新民圖書館	共和書局	文華書局	聚生書局	競存書館	晉升山房	問經堂	汲古閣	致育館	悅興學社	日新書社	會文堂	神州圖書局	永衡官書局	維新書報社	魁昇書莊	曹萬豐書莊	益印務公司	瑞經房	新加坡	新加坡	哈爾濱	龍江	吉林	奉天	奉天	奉天	奉天	奉天	奉天	奉天	奉天	奉天	奉天	奉天	奉天	奉天	奉天	奉天
怡福記	文	新民圖書館	共和書局	小說林	樂群公司	文華書局	聚生書局	導文社	問經堂	晉升山房	競存書館	聚生書局	導文社	樂群公司	文華書局	新民圖書館	共和書局	小說林	益學社	二酉山房	蘇州	蘇州	百城書館	文會山房	益學社	二酉山房	蘇州	蘇州	蘇州	蘇州	蘇州	蘇州	蘇州	蘇州	蘇州	蘇州	蘇州	蘇州	蘇州

We code the circulation locations for all volumes during 1915–22. Figure A.4(II) presents the geographical circulation of the *New Youth* over time, which shows that the number of years available within a prefecture varies widely.

Figure A.4. II. Circulation Locations of the New Youth



Step 2. Coding the Locations of the Cadets Over Time. Based on the cadets' biography, we use information on the cadet's recorded life events with a focus on the time and location to code the cadets' location in each year, as illustrated in Figure A.4(III). This way, we construct an individual-year level panel dataset with the cadets' location. Figure A.4(IV) presents the geographical distribution of all cadets in each year during 1915-22. As shown, they were widely spread across China.

Figure A.4. III. Coding Life History

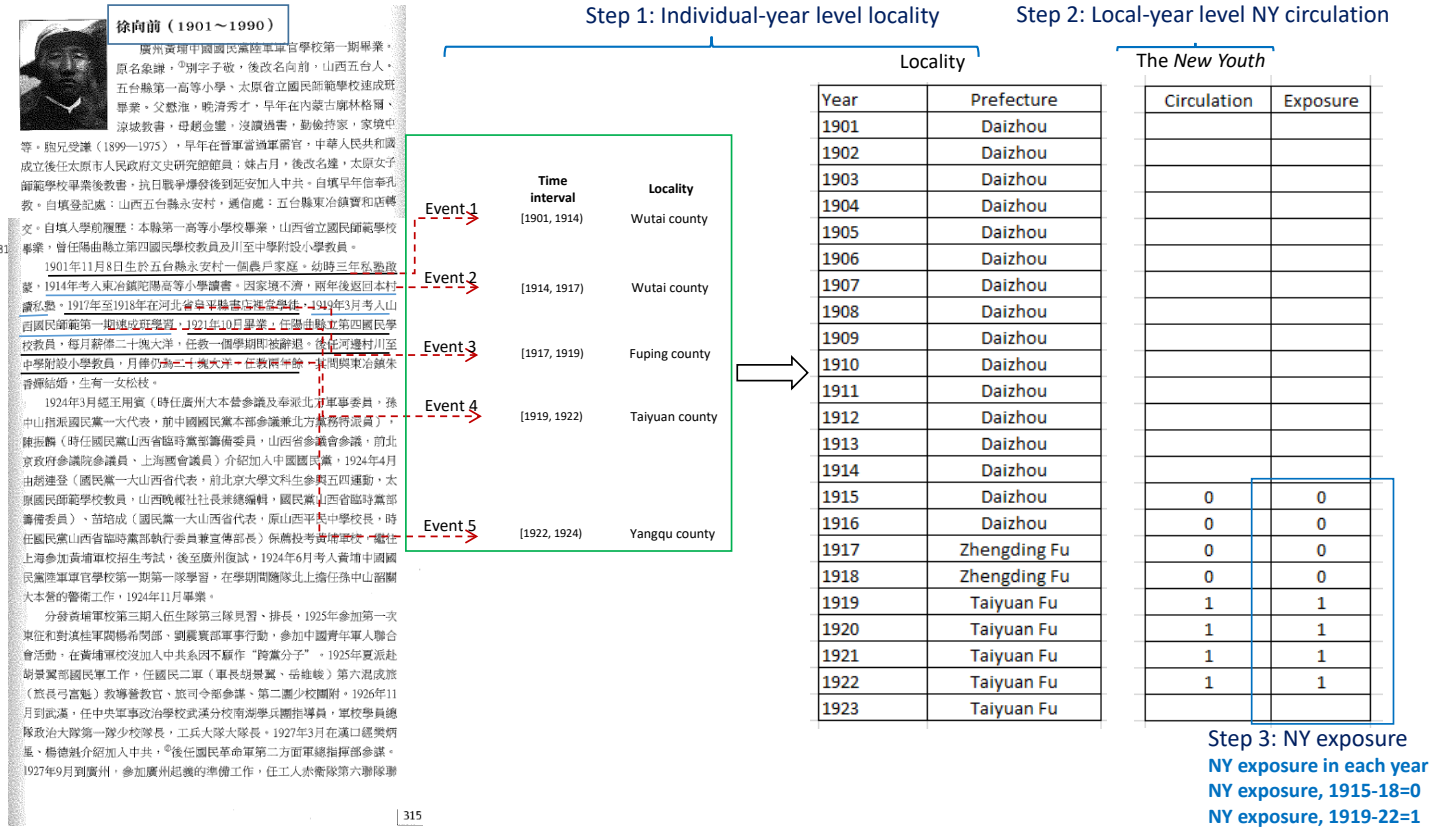
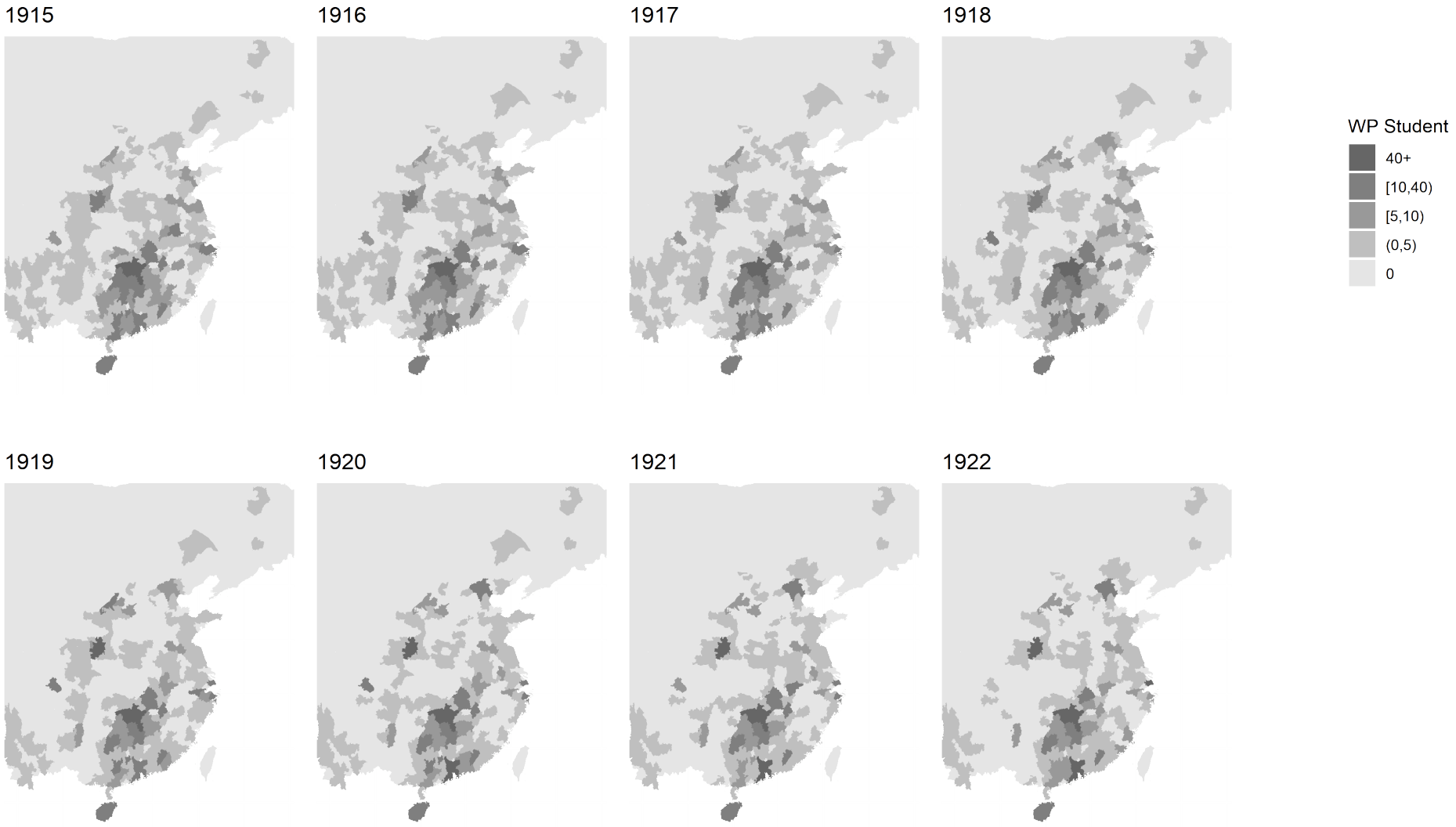
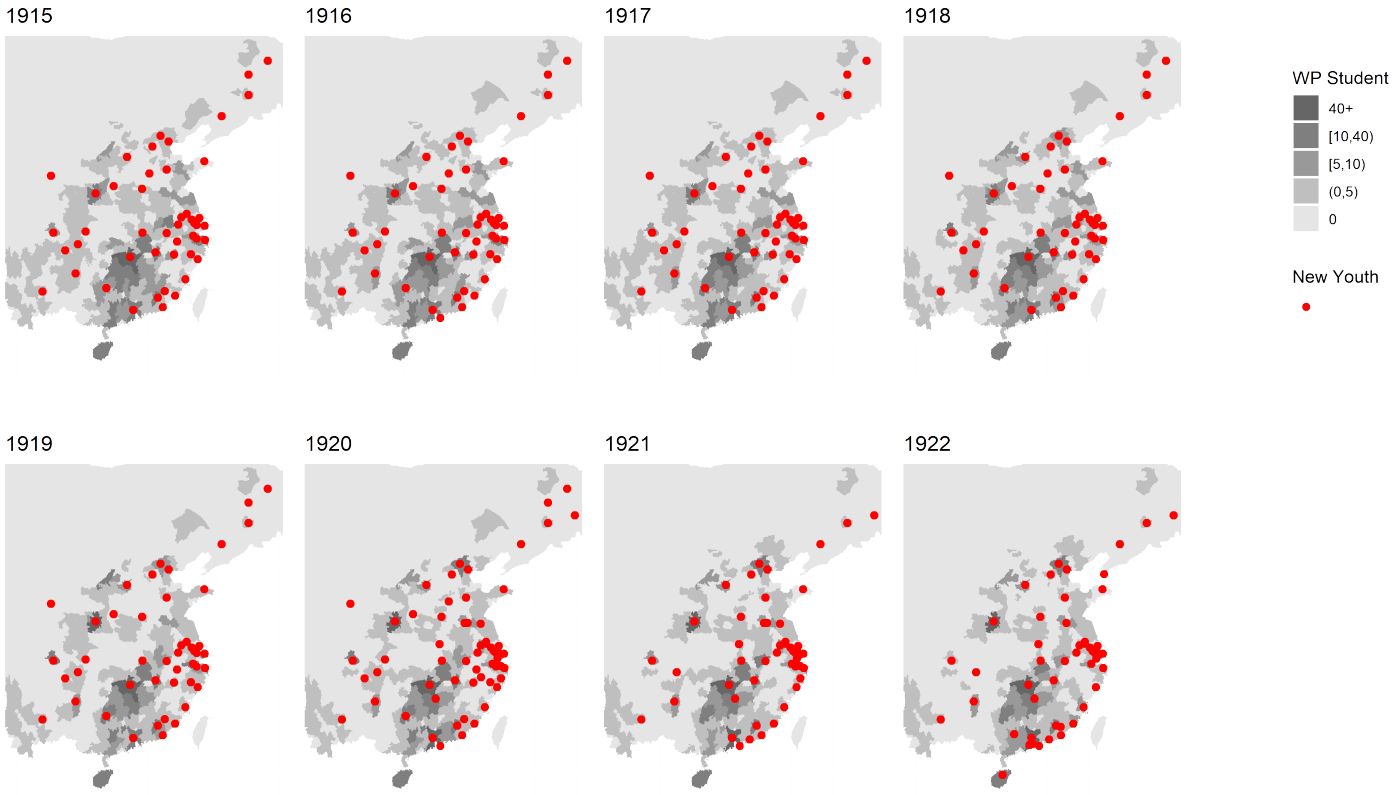


Figure A.4. IV. Cadet Location Year by Year



Step 3. Defining Exposure to the *New Youth* Finally, we define whether a cadet was exposed to the *New Youth* and the Communist ideology. We combine cadets' location and *New Youth*'s circulation in Figure A.4(V). If a cadet lived in a locality (represented by the grey background) with *New Youth* circulation (represented by the red point), this cadet was exposed to the *New Youth*. Using Xu Xiangqian as an example, Xu lived in Taiyuan during 1919–22 when and where the *New Youth* was available. Thus, Xu was exposed to the *New Youth* in the years 1919–1922.

Figure A.4. V. Exposure to the *New Youth*



B Additional Analyses

B.1 Heterogenous Effects

Table B.1 presents the interaction effects between post-1919 *New Youth* exposure and various personal characteristics. As shown, while there seems to some weak complementarity between social networks and ideology exposure, there are no strong heterogenous effects in general.

Table B.1. Impact of Post-1919 *New Youth*: Heterogenous Effects
Dependent Variable: CCP=0/1

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
NY exposure, 1919-22	0.122**	0.112*	0.118**	0.126**	0.117**	0.125**	0.117**	0.117**	0.116**	0.117**	0.118**	0.118**
	(0.055)	(0.058)	(0.055)	(0.055)	(0.056)	(0.056)	(0.058)	(0.056)	(0.056)	(0.056)	(0.055)	(0.056)
NY*1(Birth year>1900)	-0.116											
	(0.095)											
NY*Education: vocational		-0.075										
		(0.110)										
NY*Education: college			0.019									
			(0.132)									
NY*# CCP referees				0.135*								
				(0.076)								
NY*Family: gentry					0.049							
					(0.087)							
NY*Family: business						0.151*						
						(0.091)						
NY*Family economic status							0.003					
							(0.085)					
NY*# siblings								0.000				
								(0.014)				
NY*Married									0.010			
									(0.090)			
NY*Having child										-0.022		
										(0.129)		
NY*Religious											0.044	
											(0.116)	
NY*Smoking and drinking												0.071
												(0.146)
NY exposure, 1915-18	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Prefecture FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Team FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Personal characteristics I	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Personal characteristics II	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Observations	530	530	530	530	530	530	530	530	530	530	530	530
R-squared	0.545	0.543	0.542	0.546	0.543	0.546	0.542	0.542	0.542	0.542	0.542	0.542

Note. Personal characteristics I include birth year fixed effects, vocational education, college, and number of CCP references; Personal characteristics II include family backgrounds (gentry, business), family economic status (1-3), number of siblings, marriage status, dummy indicating whether having children, religious belief, and smoking and drinking habit. Standard errors in parentheses are clustered at the home county level; *** p<0.01, ** p<0.05, * p<0.1.

B.2 Alternative Standard Errors

Robust standard errors are reported in parentheses, whereas two-way clustering standard errors at home county level and birth year level are presented in brackets. These standard errors are close to those clustered at the home county level.

Table B.2. Impact of Post-1919 *New Youth*: Various Standard Errors
Dependent Variable: CCP=0/1

New Youth Exposure defined at	Prefecture level						County level					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
					Teams 1-4						Teams 1-4	
New Youth Exposure, 1919-22	0.109		0.128	0.127	0.127	0.117	0.153		0.152	0.181	0.162	0.172
	(0.042)***		(0.044)***	(0.047)***	(0.054)**	(0.053)**	(0.064)**		(0.064)**	(0.070)***	(0.081)**	(0.083)**
	[0.046]**		[0.048]**	[0.050]**	[0.053]**	[0.051]**	[0.057]**		[0.057]**	[0.053]***	[0.048]***	[0.046]***
New Youth Exposure, 1915-18		-0.047	-0.081	-0.055	-0.091	-0.094		-0.044	-0.038	-0.006	-0.103	-0.104
		(0.046)	(0.048)*	(0.051)	(0.059)	(0.061)		(0.080)	(0.079)	(0.085)	(0.101)	(0.103)
		[0.042]	[0.040]*	[0.044]	[0.052]	[0.050]*		[0.106]	[0.107]	[0.102]	[0.110]	[0.109]
Prefecture FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
County FE							Y	Y	Y	Y	Y	Y
Team FE				Y	Y	Y				Y	Y	Y
Personal characteristics I				Y	Y	Y				Y	Y	Y
Personal characteristics II						Y						Y
Observations	689	689	689	689	530	530	689	689	689	689	530	530
R-squared	0.386	0.381	0.389	0.443	0.534	0.542	0.560	0.552	0.560	0.603	0.747	0.750

B.3 Measurement Error

We conduct four sets of analyses to make sure our finding is not driven by measurement error at the locality or individual levels.

i. Dropping Metropolitan Cities. Our estimates are similar or become a bit larger than our baseline estimate if we drop the metropolitan cities from our sample.

Table B.3. I. Dropping Big Cities; Dependent Variable: CCP=0/1

	All cadets				Teams 1-4			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Excluding who had been	Beijing	Shanghai	Guangzhou	All three	Beijing	Shanghai	Guangzhou	All three
CCP mean:	0.163	0.163	0.177	0.172	0.160	0.160	0.179	0.173
New Youth Exposure, 1919-22	0.135***	0.133***	0.132**	0.212**	0.127**	0.126**	0.140**	0.199**
	(0.047)	(0.045)	(0.066)	(0.088)	(0.058)	(0.054)	(0.069)	(0.088)
New Youth Exposure, 1915-18	Y	Y	Y	Y	Y	Y	Y	Y
Prefecture FE	Y	Y	Y	Y	Y	Y	Y	Y
Team FE	Y	Y	Y	Y	Y	Y	Y	Y
Personal char. I	Y	Y	Y	Y	Y	Y	Y	Y
Personal char. II					Y	Y	Y	Y
Observations	613	652	417	314	456	494	407	306
R-squared	0.438	0.445	0.592	0.563	0.547	0.558	0.602	0.577

Note. Personal characteristics I include birth year fixed effects, vocational education, college, and number of CCP references; Personal characteristics II include family backgrounds (gentry, business), family economic status (1-3), number of siblings, marriage status, dummy indicating whether having children, religious belief, and smoking and drinking habit. Standard errors in parentheses are clustered at the home county level; *** p<0.01, ** p<0.05, * p<0.1.

ii. A Continuous Measure of *New Youth* Exposure. Our finding is robust to using a continuous measure of *New Youth* exposure, where we calculate the exposure as the share of years being exposed. The results are presented in Table B.3(II).

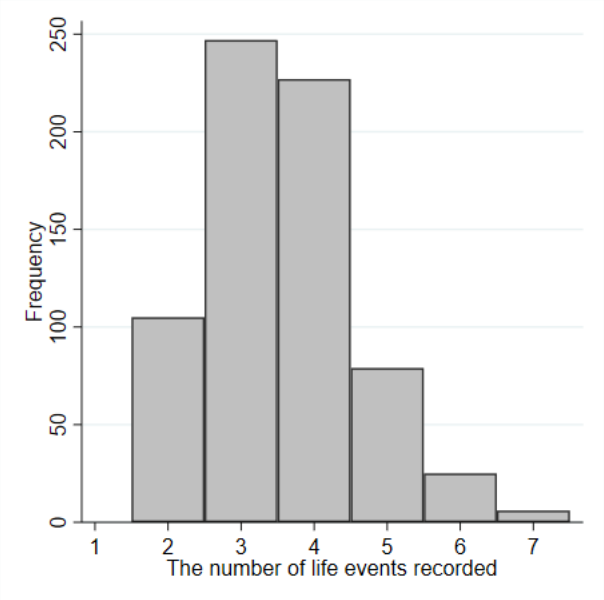
Table B.3. II. A Continuous Measure of New Youth Exposure; Dependent Variable: CCP=0/1

	(1)	(2)
		Teams 1-4
Average New Youth exposure, 1919-22	0.159***	0.161**
	(0.058)	(0.070)
Average New Youth exposure, 1915-18	-0.002	-0.068
	(0.069)	(0.081)
Prefecture FE	Y	Y
Team FE	Y	Y
Personal characteristics I	Y	Y
Personal characteristics II		Y
Observations	689	530
R-squared	0.464	0.564

Note. Personal characteristics I include birth year fixed effects, vocational education, college, and number of CCP references; Personal characteristics II include family backgrounds (gentry, business), family economic status (1-3), number of siblings, marriage status, dummy indicating whether having children, religious belief, and smoking and drinking habit. Standard errors in parentheses are clustered at the home county level; *** p<0.01, ** p<0.05, * p<0.1.

iii. Precision of Life Event Records. The major life events for our studied individuals—who were in their early 20s in 1924—are education and jobs. On average, each cadet has 3.6 recorded life event records. As Figure B.3 shows, the majority of the cadets (474 out of 689) have 3 or 4 recorded events. About 15% (105 out of 689) have 2 recorded events, and 16% (110 out of 689) have at least 5 recorded events.

Figure B.3. The Number of Life Events Recorded



To check whether our finding is affected by the number of records recorded, we examine

whether our estimate varies by the number of the records. This is not the case, as shown in Table B.3(III). Our finding also holds if we remove those who have few or many events recorded.

Table B.3. III. Considering the Number of Recorded Life Events

	(1)	(2)	(3)	(4)	(5)	(6)
				Teams 1-4		
#Recorded events:		>2	<5		>2	<5
New Youth exposure, 1919-22	0.127**	0.165***	0.166***	0.112**	0.135**	0.153**
	(0.053)	(0.060)	(0.058)	(0.055)	(0.061)	(0.063)
#Recorded events * New Youth, 1919-22	0.011			-0.002		
	(0.045)			(0.049)		
#Recorded events:	0.052			0.065		
	(0.036)			(0.045)		
New Youth exposure, 1915-18	Y	Y	Y	Y	Y	Y
Prefecture FE	Y	Y	Y	Y	Y	Y
Team FE	Y	Y	Y	Y	Y	Y
Personal characteristics I	Y	Y	Y	Y	Y	Y
Personal characteristics II				Y	Y	Y
Observations	689	584	579	530	488	426
R-squared	0.455	0.489	0.448	0.554	0.574	0.599

Note. Personal characteristics I include birth year fixed effects, vocational education, college, and number of CCP references; Personal characteristics II include family backgrounds (gentry, business), family economic status (1-3), number of siblings, marriage status, dummy indicating whether having children, religious belief, and smoking and drinking habit. Standard errors in parentheses are clustered at the home county level; *** p<0.01, ** p<0.05, * p<0.1.

iv. Ending Year of Recorded Events. Some recorded events did not include the ending year. In these cases, we use the beginning year of the next event to infer the ending year. This assumption may induce some measurement error which could be a concern of such type of error varies significantly pre-post 1919. As another sensitivity check, we show that our finding is robust to dropping the events that ended in 1919 or 1920 in our data (Table B.3(IV)).

Table B.3. IV. Considering the Ending Year of Recorded Life Events

	(1)	(2)	(3)	(4)	(5)	(6)
				Teams 1-4		
Drop ending year=	1919	1920	1919-20	1919	1920	1919-20
New Youth exposure, 1919-22	0.145***	0.117**	0.139***	0.126**	0.118**	0.130***
	(0.045)	(0.047)	(0.045)	(0.050)	(0.053)	(0.050)
New Youth exposure, 1915-18	-0.008	-0.040	0.004	-0.061	-0.077	-0.043
	(0.050)	(0.057)	(0.048)	(0.069)	(0.066)	(0.067)
Prefecture FE	Y	Y	Y	Y	Y	Y
Team FE	Y	Y	Y	Y	Y	Y
Personal characteristics I	Y	Y	Y	Y	Y	Y
Personal characteristics II				Y	Y	Y
Observations	689	689	689	530	530	530
R-squared	0.447	0.443	0.448	0.543	0.543	0.545

Note. Personal characteristics I include birth year fixed effects, vocational education, college, and number of CCP references; Personal characteristics II include family backgrounds (gentry, business), family economic status (1-3), number of siblings, marriage status, dummy indicating whether having children, religious belief, and smoking and drinking habit. Standard errors in parentheses are clustered at the home county level; *** p<0.01, ** p<0.05, * p<0.1.