# Data

The data used in this analysis originated from North Korean news media, collected and processed by the North Korea Information Portal, and further cleaned and coded by our research team. The North Korea Information Portal[[1]](#footnote-1) is a data repository managed by South Korea’s Ministry of Unification. The Portal preserves a host of data about North Korea including social and economic statistics, news media, legal regulations, annual reports and expert analysis. Of particular interest to our study is the personnel data presented in the North Korean Biographical Database[[2]](#footnote-2) which, to the best of our understanding, was extracted by Ministry of Unification researchers from North Korean media.

The Biographical Database has been restructured at least once since we began accessing it in 2015. The data we extracted from past and present iterations of the database includes the surname, first name, sex, birthdates, birthplace, current positions, and when applicable, date of death, for approximately 637 prominent North Korean elites. In addition to this basic information, the most current version of the database provides three separate tables for family, education and career items. The family table indicates how the individual is related to any other individuals contained in the database. Education items include schools attended, degrees received and years of graduation. Career items include the organization and position attained and the month and year either of when the position began or was reported in North Korean state media.

While the database is well-structured, the data itself is woefully messy and incomplete. Biographical and educational details such as birth year, birthplace, degree and year of graduation are frequently missing. Moreover, education and family data are only present for a small percentage of individuals. By contrast, most individuals have one or more items in their career table; however, career data is also far from complete as items often lack position start dates, particularly for retroactively added items predating the Internet. The most problematic aspect of career items is that they lack any kind of structure. The database typically reports career items as sentence fragments summarizing information extracted from media articles. In many cases, the organization or position of the job are not clear. Some items appearing in the career table actually correspond to family events (e.g., marriage), education (e.g., graduation), attendance at a major event (e.g., a state funeral), resignation or removal from a position, or a significant life event (e.g., death). Moreover, many career items refer to multiple jobs attained at the same time. While the education and family tables offer some interesting opportunities for future analysis, this study exclusively draws on career table data.

Processing career table, in order to make it amenable for statistical analysis, was a massive undertaking in data management, cleaning and coding. First, we de-clustered distinct career and life events from each career item, resulting in 9033 unique career items. Second, among these 9033 items, we distinguished 6762 job events from 2271 other career and life events. Third, we parsed the starting year and month, organization and position for each of the 6762 job events.

As our team moved from parsing to coding organizations and positions within North Korea’s political institutions, our team realized that an organizational tree would be necessary for systematic coding and analysis. We based our organization tree of North Korea’s political institutions on documents provided by the North Korea Information Center, another information portal managed by South Korea’s Ministry of Unification. In particular, we relied on the 2022 Personnel Directory of North Korean Institutions and a supplementary directory for non-party and social organizations.[[3]](#footnote-3) These directories list more than 1500 individuals, many of whom are not included in the North Korea Biographical Database. However, the Personnel Directory of North Korean Institutions was an invaluable resource for constructing a systematic organizational tree. At present our organization tree includes more than 2000 organizations and twice as many positions contained within the North Korean party, military, government and non-party and social organizations. Within each major institution, organizations are hierarchically nested up to five layers deep. Organizations within the top two organizational layers are near complete; however, from the third layer down, we only include those organizations appearing among the job items of the Biographical Database. Organizations which have been renamed, abolished or merged have been aliased or linked to currently active organizations. Once we constructed the organization tree to the first two layers, we simultaneously updated the tree according to job items in the Biographical Database while also coding job items according to the organizational tree.

Finally, we added metadata to the organizational tree which could be used to assist analysis of elite careers. We differentiated elected from non-elected positions. We also added arbitrary indicators of organization and position rank. Organization rank was simply calculated as an organization’s level within its institution’s organizational hierarchy. For example, since the Cabinet occupies the top level of its institution’s hierarchy, its organizational rank is coded as 0. The Ministry of Foreign Affairs is immediately under the Cabinet, and so its organizational rank is coded as 1. The First Asia Bureau, which is immediately under MOFA, is coded as 2, and so on. Position ranks are coded within their respective organizations. The top position in each organization is coded as 1, secondary positions are coded as 2, and all other positions are coded as 3. Within the Ministry of Foreign Affairs, for example, the position rank of the Minister position is coded as 1, all Vice Minister positions are coded as 2, and all advisor positions are coded as 3. We took pains to differentiate “Rank 3” positions in a higher-level organization from “Rank 1” positions in a lower-level organization. For example, although the Bureau Chief of the First Asia Bureau answers to the Minister of Foreign Affairs, rather than code this a rank 3 position in a rank 1 organization (i.e., Ministry of Foreign Affairs), we code it as a rank 1 position in a rank 2 organization (i.e., First Asia Bureau). In many cases, a rank 3 position in a higher-level organization may actually be a rank 1 position a in minor lower-level organizations of which we are not aware. Political appointees within military and government institutions present an additional complication. For example, the most non-party organizations are staffed by a party secretary or political officer. We treated political offices as a parallel chain of command along non-party administrators and ranked these positions in a similar fashion. For example, the First Party Secretary attached to a Cabinet ministry was given a position rank of 1, any secondary Party Secretaries were given position rank 2, and any Party Clerks were given position rank 3.

Our analysis of personnel transitions required additional structuring of the data, namely collecting each elite’s job items, arranging their resumes in chronological order, and then pairing each time-adjacent position. Comparing a job’s characteristics (i.e., organization and position rank) with those of the immediate prior job allow us to make inferences about career promotions and mobility within and across institutions. In order to construct elite resumes and a career transitions dataset, we further filtered out an additional 2410 items reflecting elected positions (e.g., participation in the Supreme People’s Assembly) as well as jobs with uncertain start dates, organizations or positions. This resulted in 4321 non-elected job items.

Using these items, we constructed two transition datasets. The first utilized all 4321 items and included government and non-governmental jobs. The *all-job-transitions* dataset contained 2868 transitions. Of the 637 elites in our dataset, 444 leaders had one or more of these *all-job-transitions* (min = 1). This dataset included 1532 unique positions across 1009 unique organizations. Frequency of elites by the number of all job transitions may be seen in Figure X1. The distribution of the number of transitions in *all-job-transitions* is quite skewed to the right (mode = 1, mean = 6.50) by a few prominent leaders having prolific resumes (max = 48).

The second dataset, *in-gov-transitions*, excluded 1179 non-governmental positions and contained 3142 job items comprising 955 unique positions across 622 unique organizations. Of the 637 elites in our dataset, 381 leaders had one or more of these *in-gov-transitions* (min = 1). Frequency of elites by the number of in-gov job transitions may also be seen in Figure X2. The distribution of the number of transitions in *in-job-transitions* is also quite skewed to the right (mode = 1, mean = 4.76) by a few prominent leaders having prolific resumes (max = 36).

Lastly, having structured these two transitions datasets, we calculated two additional variables, Organization Advancement and Position Advancement, to measure and test hypotheses about elite career mobility. Organization Advancement was simply calculated by subtracting current Organization Rank from prior Organization Rank for each transition. Position Advancement was calculated in a similar fashion, subtracting current Position Rank from prior Position Rank. For example, if an elite was promoted from the head of level 3 organization (OrgRank=3, PositionRank=1) to vice-head of level 2 organization (OrgRank=2, PositionRank=2), their Organization Advancement measure for that transition would be coded as 1, while their Position Advancement would be coded as -1. Positive values of Organization and Position Advancement indicate upward mobility within the organizational hierarchy. It should be noted that Organization Ranks are relative rankings of status within and across institutions. For example, position in the highest echelon (OrgRank=0) of a lower-tier institution (e.g., a non-governmental, social organization) may actually confer less power and authority than a position in the middle echelons (OrgRank>2) of a higher-tier institution (e.g., the party). Nonetheless this coding scheme constitutes a first-order attempt to systematically represent and analyze career mobility of North Korean elites.

1. https://nkinfo.unikorea.go.kr/nkp/main/portalMain.do# [↑](#footnote-ref-1)
2. <https://nkinfo.unikorea.go.kr/nkp/theme/peopleList.do>. [Bukaninmul]. [↑](#footnote-ref-2)
3. <https://unibook.unikorea.go.kr/material/view?materialScope=NEW&entryDateDuration=m-3&format=&method=&fields=&keywords=&pageSize=10&page=1&dataTypes=8&uid=CAT-20221200000000056>. *2022 북한 기관별 인명록* and *2022 북한 기관별 인명록(별책)*. [↑](#footnote-ref-3)