ONLINE APPENDIX TO DESIGNING HEAVEN'S WILL: THE JOB ASSIGNMENT IN THE CHINESE IMPERIAL CIVIL SERVICE

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In this appendix, we first describe the evolution of the Chinese civil service towards a professional civil service system, then we provide additional information and historical sources related to our study on the appointment system.

1. The evolution of the professional Chinese Civil Service system

The Civil Service Exam was introduced in the short-lived Sui dynasty (581–618), records on the details of the exams, such as the total number of exams held and selected advanced scholars were largely missing. In the following Tang dynasty (618–907), roughly 25 candidates were awarded advanced scholars, the highest degree, in every exam. Xu (1984) compiled the list of successful candidates in Tang dynasty (for additional corrections on the original list are provided, see for instance Meng (2003)). From the middle of the eighth century, the Tang administration started to appoint military governors along the western and northern borders, and granted them the ability to appoint personnel, in the hope that these regions could perform better when given greater autonomy during a time of constant border conflicts. As a consequence, the Tang administration lost control over appointments of local officers.

The situation changed in the following Song¹ dynasty.¹ A career system was established in the eleventh century as a result of the Yuanfeng Reform (1080–1082). The reform restructured the political apparatus. First, it combined the career-based official system (*ji lu guan*) and the position-based official system (*zhi shi guan*). In Tang and Song¹, an officer could have an officer rank (granted by the central government and called *guan*) but without specific positions or duties (called *zhi*)), and vice versa. The Yuanfeng reform removed some positions without rank, and introduced remuneration mainly based on rank. Extra compensation was added depending on the specific position. Second, it consolidated

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¹As in the paper, we add a superscript of a number next to the dynasty to indicate the order to help readers when following the chronological order of the Chinese dynasties discussed in our paper: $Song^{1}$ precedes $Ming^{2}$, which again precedes $Qing^{3}$.

the divided power in appointing jobs. Prior to the reform, appointments were divided between the Ministry of Personnel (for entry-level jobs) and the Secretariat-Chancellery (for high-level jobs). Even within the Ministry of Personnel, it was further divided into four units and each was responsible for the assignment of some jobs. After the reform, high-level jobs were appointed through court discussions, and the order of candidates was considered of less importance. Entry-level jobs, depending on the functions, were appointed by the one of the four units at Ministry of Personnel. The ministry would verify candidates' exam records, experience, patronage, criminal record, and physical conditions before the appointments.

In Song¹ dynasty, the number of candidates selected through exams increased significantly, and more than 800 advanced scholars were selected per exam. Additional figures from Li (1202) suggest that among the appointed officials, candidates selected by exams represented roughly 28%, compared to the 57% of the candidates qualified in recognition of services by their fathers. The following dynasties inherited mostly the Song¹ political system—in particular the selection of civil servants by exams—and the career system, with the exception of the interruption during the Yuan dynasty when the civil service exam was suspended. Table 1.1 presents the number of advanced scholars over time and the sources for these figures.

	No. of ex- ams	No. of AS	No. of AS per exam	No. of AS per exam & per millions popu- lation	Source
Tang (618 - 907)	268	6646	25	0,3100	Xu (1984)
Song (960 - 1279)	130	109950	846	8,4577	Zhang (1987)
Yuan (1315 - 1368)	16	1139	71	0,7910	Shen (2016)
Ming (1368 - 1644)	89	24595	276	1,9739	Gong and Qiu (2006)
Qing (1644 - 1905)	112	26848	240	0,7990	Mao and Jin (2005)

TABLE 1.1. Number of advanced scholars (AS) across dynasties

Notes: The years inside the brackets indicate the period in which the Civil Service Examination was used. The numbers in the first to the third columns are compiled from the indicated sources respectively. The numbers in the fourth column is based on the authors' own calculation.

2. Additional background information on the appointment system

2.1. The Nine-rank System. The civil service jobs were categorized into nine ranks, with rank 1 the highest level and rank 9 the lowest level. Each rank was further divided into 2 sub-ranks, "principal" (*zheng*) and "subordinate" (*cong*). Following the convention in translating these sub-ranks, we use A to indicate principal rank and B to indicate subordinate rank. Jobs below these 9 ranks were those hired by local governments, and they were referred to as "not in the common system" (*bu ru liu*). The Nine-rank System was in fact introduced already during the Three Kingdoms period (220 –280), before the

establishment of the professional civil service system as well as the examination system. The original Nine-rank System was introduced mainly for the purpose of evaluating candidates, since bureaucrats were selected based on recommendation (*cha ju*) at that time. This system was replaced later on by the Civil Service Exam. However, these classifications were continued to be used for the ranking of jobs. The rank of most jobs were the same over different dynasties of our interests, modification were sometimes made.

As we have mentioned in the paper, candidates selected by examination were assigned to entry-level jobs. Among these jobs, higher-ranked jobs were appointed to candidates with higher degree or exam results. For example, in Ming², advanced scholars, the top tier of candidates selected through examination, were selected for various jobs ranging from rank 5B to rank 8A, whereas tribute scholars and recommended men, the next tier of candidates selected through examination, were considered for jobs typically from 7A to 8B. On the other hand, while higher-ranked jobs were linked with higher salaries, they were not necessarily considered more desirable by candidates. In general, jobs in metropolitan areas were considered more desirable by candidates than jobs in the provinces.

2.2. Appointment System in Song¹. It was also formalized in Song¹ the practice of differentiated appointment procedures depending on the rank of jobs. Middle and high-ranked jobs were assigned through court discussion (tang chu), and the order of candidates (by exams) was considered of less importance. Entry-level jobs were assigned through the general appointment, where an order—mainly on exams and sometimes on patronage—was used. See SS (1343), Section 4 of Rules on Selection and Appointment (*xuan ju*) for more details on the types of appointments.

Our description of the Song¹ procedure is based on Appointments (*cha zhu men*), Section 7 of Rules of Ministry of Personnel from Yongle Encyclopedia (Yao, 1408). Gong (1997) provides an overview of the Song¹ civil service system and discusses the assignment procedure used.

2.3. Appointment System in Ming².

2.3.1. *Rules on Eligibility.* Ming² official documents provide more details on the types of jobs candidates were eligible to depending on their degree qualifications. The earlier rules described the appointment for the first-grade advanced scholars, but were however less clear about the rest. In Rules of Appointments, Section 4 of Ministry of Personnel from Collected Statutes of Ming (MHD, 1587), the following is mentioned:

"As for the appointments of advanced scholars, it was decided during Hongwu period (1368-1399), the top candidate from the first-grade was appointed to senior editor at Hanlin Academy, and the second and third candidates from the first-grade were appointed to junior editors at Hanlin academy. The rest of candidates were sent to various ministries and departments for internship, they would be appointed following the order to both posts inside and outside the capital. "

The rules for the rest of candidates were more clarified in the subsequent periods. The following practice in early Ming² was noted in the Miscellaneous Notes in the Bean Garden (Lu, circa 1494)—a collection of political essays by Lu Rong, the vice commissioner of Zhejiang province, which is widely used by historians:

"In the recent civil service exams in Hongwu Year 4 (1371) ... February nineteenth, the palace exam was held. On twentieth, names (of newly selected candidates) were announced publicly outside Meridian Gate, and written on imperial edict, (these candidates) were then received by the emperor in the Hall of Supreme Harmony. In the same date, appointments were made, and (those newly appointed officials) acknowledged the gratitude for the emperor outside the Gate of Supreme Harmony. On the twenty-second, banquets were held in the Central Secretariat, and on the twenty-third, (candidates) visited the Confucius Temple in the Directorate of Education, and performed sacrifice ceremonials to Confucius. The first grade consisted of three people, who were awarded the title of distinguished advanced scholars (*jinshi jidi*). The first person was appointed as vice director, and the second and the third person were appointed as ministry secretaries. The second grade consisted of seventeen people, who were awarded the title of advance scholars background (jinshi chushen), and were appointed as ministry secretaries. The third grade consisted of a hundred people, who were awarded the title of along with advance scholar background (tong jinshi chushen), and appointed to assistant magistrates. Alongside the names, their home provinces were mentioned, in the same format as today's. This is a brief description of the system at the beginning of the dynasty ..."

The exact jobs eligible to candidates were slightly different in the early $Ming^2$ than later periods. We presented in the paper the the version from mid $Ming^2$. In Section 3, Selection and Appointments of History of Ming (MS, 1739), it describes:

"For the appointment of officials, Ministry of Personnel are in charge of civil servants, Ministry of War are in charge of military officials. Among these appointments, the ones made by the Ministry of Personnel are of extreme importance. Among the four offices within the Ministry of Personnel, the Office of Appointment and the Office of Evaluation are of particular importance. Civil servants are selected from advanced scholars, tribute scholars and recommended men, as well as those inherited status from fathers, students who approved by the emperor, students from the imperial college, students recommended by local governments. In addition, there are clerks, seal officers, accountants, translators and other various types of functionaries working for local governments. The advanced scholars are one group, the tribute scholars and recommended men are another group, and the clerks etc. are the third group. This is what is called " the use of three groups". The advanced scholars can be selected for, among the imperial posts, the secretaries to the six ministries(*zhu shi*), secretaries to the emperor (*zhong shu*), officers for foreign affairs (*xing ren*), officers for court of judicature review (*ping shi*), and officers at Court of Ceremonials (*bo shi*). They can be selected for, among provincial posts, sub-prefecture magistrates (*zhi zhou*), prefecture judicial officers (*tui guan*), and county magistrates (*zhi xian*). Recommended men and tribute students can be selected for provincial jobs, which includes prefecture judicial officers (*tui guan*) ..."

Similar descriptions on the types of jobs eligible to candidates can be found in the Regulations of Ministry of Personnel (LBZZ, 1614) as well as in *Guoque* (Tan, 1621)—the non-official history of Ming² widely used by historians.

2.3.2. The First $Ming^2$ procedure. While we know from above that the possible appointments per degree type, the official documents were less clear about how each appointment was evaluated and decided in early and mid $Ming^2$. For our purpose, we present the sources, both official documents and secondary sources, that allow us to reconstruct, first, how the ranking of candidates were used, and second, how each candidate was appointed to job.

Regarding the order of appointments, official documents mention that an order was followed when making appointments, though they did not specify if this order was purely based on exam results, or it was an hybrid version of both exam results and patronage as in the previous Song^{1} . Various secondary sources help us to clarify that the order was indeed determined by exam results.² For instance, in a letter to Weng Xizeng for his appointment to Fuliang county (*Song Weng Xizeng zhi Fuliang xu*) by Wang Ao (1450-1524)—a prominent politician who held position at the Grand Secretariat, the following was written:

"Today's advanced scholars, except for the first grade, all were appointed by the Ministry of Personnel. The second grade were appointed ministry secretaries inside (the capital), and sub-prefecture magistrates outside (the capital). The third grade were appointed judicature review officers, foreign affairs officers, and ceremonials officers inside (the capital), and county

 $^{^{2}}$ For more details, please see Pan (2005) which provides a review of the appointment system in Ming². We present here only sources relevant to our study on appointment methods for candidates selected by examination.

magistrates outside (the capital). All these appointments were according to the order from one-time exam ..."

Next, we present the sources that help us to sketch how the assignments were implemented. First, while following the order of candidates according to their exam results from high to low, the jobs considered seem to have followed some order as well around mid Ming². This method assigned candidates first to a set of jobs, then another set of jobs. For example, Veritable Records of Ming (*Ming shilu*)(MSLX, 1569)—a collection of chronological records from court edicts and regulations—describes the following rules in 1491:

"Ministry of Personnel announces: In the recent cases, the first seven or eight third-grade advance scholars are considered for jobs outside (the capital), and the last three or two are considered for metropolitan jobs. There are advanced scholars who should be appointed to jobs outside (the capital) but tried to avoid the appointments by claiming sick or on other duties. From now on, except for those who need to mourn for a dead parent, those including sick or on other duties will be appointed following the order (of their exam results). Those who should be appointed jobs outside (the capital) will be appointed jobs outside (the capital), and those who should be appointed metropolitan jobs will be appointed metropolitan jobs. This way everyone is treated fairly, and the appointment procedures will not be damaged ..."

In this case, provincial jobs—eligible to both advanced scholars and recommended men and tribute scholars (AB jobs in the terminology of our paper)—were first assigned, then the metropolitan secretary jobs—eligible to only advanced scholars (A jobs). We don't have enough information to tell whether this order was used just in these recent cases, or it was a general practice in mid Ming². There are two points in favor of the former scenario. First, from the context of the time, this ordering of jobs seems to have been used for balancing the growing preference for metropolitan jobs over provincial jobs, therefore the provincial jobs were appointed before the metropolitan secretary jobs. Second, other orders were mentioned. For instance, in another correspondence sent by the Ministry of Personnel—collected in the petitions that have not received replies from the emperor (*Shenmiao liuzhong zoushu huiyao*)(Dong, circa 1622) and submitted in 1613 by Guan Yingzhen, the supervising censor of Ministry of Revenue at that time—provided another glimpse into the order of jobs in late Ming².

"There are provincial exams, metropolitan exams, and after that palace exams. After palace exams there are internships, and after all these steps there are finally the appointments for advanced scholars. This reflects the objectives from Rites of Zhou when selecting talented officials. The top

three advanced scholars (first-grade) are assigned right away to editors in Hanlin academy, to reward their excellence. The second-grade advanced scholars are appointed to secretaries at various ministries except for the last person(s) by the selection (of exams), who will be appointed to subprefecture magistrate(s) (*zhi zhou*). If there are five, then the fifth-ranked person is appointed to sub-prefecture magistrate; and if there are ten, then the ninth and tenth-ranked persons are appointed to sub-prefecture magistrates. Sub-prefecture magistrate is also called governor, which has rank five, and how can it not be as important as ministry secretaries? Even if (provincial jobs) are not considered as important as metropolitan jobs, there are these people who got sub-prefecture magistrate and regret they could not get ministry secretaries, how is it possible that the fifth person is worse than the sixth? And the eleventh-person is better than the tenth person? The appointments of the third-grade (advanced scholars) to inside and outside (the capital) were not determined by the palace exam results but by the size of selected candidates, what is then the purpose of palace exam? Additionally, it does not matter if one is ranked one-hundredth or two-hundredth, they could become secretary to emperor, foreign affair secretary, judicature review officer, ceremonial officer, and after that prefecture judicial officer or county magistrate ... In some cases there are two people who ranked next to each other, but one is appointed inside (the capital), and the other is appointed outside (the capital), whereas in some other cases there are two people who ranked far but both appointed inside (the capital). This method is mysterious and difficult to predict, which caused complaints of unfairness. As for those who can be appointed to either inside or outside (the capital), they often ask for a favor through acquaintance, or ask for an approval from superior. By doing so, it not only creates exceptions, but also breeds connection (for promotion), is there still a rule for appointments then?"

Notice the text refers to the assignments across months. Guan was criticizing the fact that— in a given, a group of third-grade advance scholars, for example, were assigned first to metropolitan secretaries (A jobs), and then to provincial jobs (AB jobs) including judicial officers or county magistrates, and then in the next appointment month, the same order of job assignments was repeated— created unfairness for candidates, as some lower-ranked candidates (in the next appointment month) could obtain a more higher-level job than another higher-ranked candidate (in the previous appointment month). This indeed was a concern, however this is not our focus in the paper— we focus at appointment method for a given month. The more interesting information for us is the order how

jobs were assigned, and in particular, this order of assigning A jobs before AB jobs is consistent with the objective to minimize unfilled jobs, as we discussed in the paper.³

Guan continued in this petition to suggest how the appointments could be improved:

The second-grade advanced scholars, in total fifty-seven people, the first fifteen are selected for bachelors (of Hanlin academy) (*shu jishi*),⁴ (candidates) from sixteenth to forty-fifth are appointed to ministry secretaries, and the last seventh are appointed sub-prefecture magistrates. The thirdgrade advanced scholars, in total two-hundred forty people, the first two are appointed ceremonial officers, from the third to the tenth, in total eight, are appointed secretaries to emperor; from the eleventh to the twenty-sixth, in total sixteen, are appointed to foreign affairs secretaries; from the twentyseventh to the the thirty-second, in total six, are appointed to judicature review officers; from the thirty-third to the seventy-fourth, in total forty two, to the prefecture judicial officers; and from the seventy-fifth to the two-hundred-fortieth, in total a hundred sixty six, to the county magistrates. If there are people who have passed the metropolitan exam but not the palace exam, then (the candidates) appointed to county magistrates can be extended, it does not need to be limited to a hundred sixty six. From the second-grade (advanced scholars who are to be appointed) ministry secretaries to the third-grade (advance scholars who are to be appointed) county magistrates, everyone follows their order to be appointed to the vacancies, and the appointments are done once every two and half year. When it is the turn, these candidates wait for their appointments in the capital. When it is not the turn, they should be given holidays (to return home), and return to the Ministry (of Personnel) when it is their turn.

Guan suggested that the appointments should be done essentially once every three years (the first half year was usually for internships), this way it is possible to follow the order by exam results to assign them with jobs, in a way that a candidate ranked lower will not get a better job than a candidate ranked higher. We know however that appointments

³The petition was submitted after lots-drawing procedure was introduced. However, given the context, it seems that this practice reflected what had been used for some time, and very likely, before the use of lots-drawing procedure. The turn of seventeen century in fact witnesses many changes on the appointment system, including the institutionalization of lots-drawing procedure, and many debates and proposal were raised during this time. While most of them concern whether lots-drawing should be used and how it should be used, this proposal was more discussing the general aspects of the appointments, that is, how unfairness could arise due to the order of jobs across months, and we think this is a feature that was likely inherited from previous practices, as we see throughout the later appointment systems build on earlier ones over time.

 $^{^{4}}$ After studying at Hanlin academy, they were examined again to see if they could work as editors at Hanlin academy.

continued to be done every other month. More interestingly, his proposal kept the order which assigns the third-grade advanced scholars, first to various metropolitan secretary jobs before prefecture judicial officers and county magistrates. As we said before, even though we lack of clear official guidelines explaining what the considerations were when assigning jobs for each individual, these secondary sources suggest that an order of jobs were considered when determining the appointments, and this order could be consistent with the objective of minimizing unfilled jobs, whereas in some other occasions this order was used for other objective such as balance the location preferences we mentioned above.

The method described above was used for the initial assignments of advanced scholars. Note that evaluations were often made case by case to see if the match fitted each other, and some times modifications were made to the initial assignments. For instance, the case mentioned in Section 3 of the main paper.

After the appointments of advanced scholars, recommended men and tribute scholars, together with candidates with other types of qualifications were appointed. In the Regulations of Ministry of Personnel (LBZZ, 1614), the following rules are mentioned for the appointments of these candidates.

"Every even month, those needed to be further examined, including recommended men, tribute scholars, those who qualified in recognition of their father's contribution, and those who studied in the Directorate of Education (guo zi jian) were tested beforehand and their answers were collected and sealed. The next day, their answers were opened and evaluated, together additional auditions, they were ranked for appointments. Recommended men were appointed to general service officers (si wu), clerk (kong mu), county magistrates around metropolitan areas (jing zhixian), and prefecture judicial officers around metropolitan areas (jing tuiguan); Recommended men and tribute scholars were both appointed to assistant prefects, county magistrates and prefecture judicial officers ...(tong pan)"

This description gives us an idea how the appointments were made for recommended men and tribute scholars. They were appointed to county magistrates and prefecture judicial officers, which were also assigned to advanced scholars. The differentiation between recommended men and tribute scholars, that the former could be appointed to jobs around metropolitan areas, seems to be a late Ming² practice, as earlier documents didn't mention this difference. Overall, there were less discussions around the appointments of recommended men and tribute scholars, as compared to the appointments of advanced scholars. 2.4. The Second Ming² procedure. Lots-drawing was in fact already used for the promotions at various ministries and departments before it was used for the general appointments of selected candidates. The Regulations of Ministry of Personnel mentions in the section on promotions of seal officers by the Bureau of Appointments LBZZ (1614):

"If there are vacancies of seal officers at departments, ministries and bureaus in two capitals, it is allowed that the clerks currently in charge report (to the bureau). The deadline to report is end of the ninth month, then the bureau (of appointments) will first use lots-drawing to decide for the vacancies, afterwards, the results will be reported for final approval by the emperor."

The use of lots-drawing was therefore probably not an innovation, but rather an application to appointments of larger scale. The lots-drawing method was used first for the urgent appointments in odd months and then to the general appointments in even months. In the reference to additional articles in regulations (Xia and Shi, 1597) the following article titled "Appointments through lots-drawing in order to show fairness" was mentioned:

"Wanli twenty-two (1595), the eighth month, Ministry of Personnel proposed to change the appointments to lots-drawing in the Eastern Hall, (this) allows transparency in official business. This proposal says: the way of general appointments was to check all the vacancies, every even months, then ask for (the emperor's) order to fill the vacancies. In the past, the schedule was tight to (check and) announce (vacancies), therefore vacancies were often drafted in advance. These vacancies were then discussed, ...but the names were known and mercy were given. Why not replace it with the method of drawing lots, this is a good solution. Ask the ministry to place tubes first, and write the vacancies (and place them) in each tube; then write on the board the jobs candidates were eligible to—which were approved by the emperor. When the appointments starts, (the ministry) guides candidates to the Eastern Hall, calling their names to draw lots, and the appointment is decided. There are things to consider further: some places of appointments are far, and some are close, therefore (the jobs) should be divided to north—five provinces, middle—five provinces, and south—five provinces, and assign (them) separately; the number of jobs in the north and the south is sometimes more and sometimes less, should use jobs from the middle to balance the north and the south. Among the jobs, some are complicated and some are simple, the candidates' talents should also be differentiated. The appointment outcomes are then announced publicly, isn't this a transparent rule? There

are easily hundreds of candidates who needed to be appointed, using the drawing of lots can take days. Therefore, it is recommended to start before the noon, (the result) of drawing lots are announced right away, this way it can be finished within the day ... The urgent appointments have been recently changed to lots-drawing already, it is considered fair by the public. However, the cabinet also has a say on the general appointments, that is why I do not dare to go ahead without asking. The emperor replies: the proposed matters concern the long-standing problems of reform, these suggestions are appropriate. Because (lots-drawing) improves appointments, and can be seen as impartial, these suggestions are therefore approved."

This text mentions the proposal submitted Sun Peiyang, the minister who instituted the lots-drawing procedure. From the text, we can see first that, the application of lotsdrawing to the general appointments is probably later than 1594—when it was used for urgent appointments first. Second, partitioned assignments were suggested already from the onset. Two concerns were mentioned. The first one is that jobs should be differentiated by distance, and the design of tubes should try to take this into account. The second one is that jobs are also differentiated by their difficulty levels, and therefore the system should try to accommodate such difference as well.

Three-tube system was suggested to account for regional differences. Candidates from each region drew jobs from the tube of their region respectively, moreover, when there are no longer jobs left in the north for northern candidates, then they could also draw jobs from the tube of middle, the same applies to southern candidates when there are not enough south jobs. The three-tube system was soon replaced by a four-tube system in 1598, which further divided jobs to northeast, northwest, southeast, and southwest. This was mentioned in a proposal submitted by official Cao Daixian, who argued that the current four-tube system was not convenient and should go back to the three-tubes (see Zhang (1978) which provides a reference to this discussion). The three-tube system was restored in 1628 (see Liu (1996) for a summary on these changes). In later texts though, variants of multi-tube system seemed not to be used, as these further divisions were more vulnerable to corruption. Indeed, more divisions implied each tube contained less jobs, and given that the appointments follows an order of candidates, it became easier to interfere with the assignments. It was reported that bribed officials placed the more desirable jobs on top when it was the turn for the candidates who bribed them to draw (see Will (2002) which discusses the problem of corruption in more details).

Regarding the second concern, it was suggested that posts within each geographic tube could be further divided into "good"—easy to manage–and "bad"—difficult to manage. When drawing a lot, depending on the assessment of the individual candidate, a higher ability candidate from the north will draw a post from the north tube and good jobs, and a lower ability candidate from the north will draw from the north tube and bad jobs (Zhu, 1638). However, further divisions of tubes according to job difficulty levels were not adopted, due to the complication in implementing, and again the potential vulnerability to corruption. In the reply to the proposal submitted by Cao Daixian we talked about earlier, the emperor rejected the suggestion of further division by job difficulty or candidates talent, as the appointments have already taken into account the different assignments for candidates with different degree qualification. This seem to resonate with the debates around the time that exam result did not always reveal one's ability, and therefore the precise order of exam result might have mattered to a less extent.

Given there were changes to the assignment procedure back and forth, our description for the first Ming² procedure focuses on the original version without regionalization, which seemed to be the version that they went back to after experimenting with multi-tube system for a short while.

From the official newspaper in 1602, the following discussion by Li Dai—the minister of the Ministry of Personnel at the time—gives us an idea how lots-drawing proceeded. We took the translation based on Will (2002).

"Previously, posts were attributed on the basis of (the qualification of) men, and this went entirely through the process of selection and appointment by our Ministry. Then it was decided to draw places (where people would be appointed) by lot. This method is perfectly just, but it includes complicated clauses, some of which cannot be known by everybody. This is why people have started to harbor doubts about its fairness. They completely ignore that territory is divided between north and south, that in the south there is the southeast and the southwest, and that in the north there is the northeast and the northwest, which is why one splits up (the drawing of lots); and that if positions open in the southeast are too few, then one will borrow from (those available in) the northeast, while if the positions open in the northeast are further splitting up (of the drawing). (Furthermore), the qualifications of men are different: for a position of magistrate or prefectural judge, for example, (those eligible) can be advanced scholars, recommended men, or tribute students, which is why one differentiates (among candidates); and the lots left by the advanced scholars are kept for the recommended men, while the lots left the recommended men are kept for the tribute students – meaning further differentiation (among candidates). As a result, all these small details get mixed up, it is always like that.

If there is (only) one candidate and one position (fitting each other), inevitably he will have his lot reserved. If there are two candidates and two positions (fitting their status), inevitably there will be a differentiation by province. Then there are cases with many positions and few candidates, or many candidates and few positions, or candidates who must avoid their native province, or candidates whom the regions (they have been allotted) do not suit, but they are willing to exchange between each other. For all of this, people have to be prompted, places will have to be weighted up, and this is also a pain ...Wouldn't it be better to publicize one day in advance the candidates and the posts involved in their entirety, to write that there are not enough positions in such-and-such region and that they will be borrowed from such-and-such region, and the next day to draw lots in the (corresponding) tubes? First one would exhaust the regions that need to be drawn by lots, then one would proceed to the borrowed posts; and for the cases where there is just one man for one position, or the isolated and lonely posts, for which there is no problem in reserving them openly, they would not be included in the drawing of lots. Thus the utmost clarity would reign, and people would know that the drawing of lots does not tolerate any private interests."

From the text, we know that advanced scholars were among the first to draw posts, followed then by recommend men and tribute scholars. It also proposed an order for drawing jobs in the context of four-tube system, first draw jobs from one's own region—one of the four region in the , and then for the tube of neighboring region. Though it was not clear if this proposal was approved.

The lots-drawing procedure has undergone many changes since its introduction, and received many criticisms, however, this procedure of randomly allocating candidates to jobs seemed routinized, and further extended to other types of appointments, such as promotion (without serving full term), appointment for teaching positions. In addition, lots-drawing procedure was also used in the military appointment.

2.5. Appointments in Qing³. Lots drawing procedure was improved and its implementation was clarified in official documents in Qing³. The scope of eligibility criteria changed slightly in comparison to that of Ming². We follow the Rules and Regulations for the Appointments by the Ministry of Civil Appointments from Tongzhi period (1856-1875) (QDLBQXZL, 1886), which complies rules from contemporary and previous periods. The text below, lists the types of candidates that were eligible for each type of jobs.

"Proctor at the Directorate of Education should give priorities to those who returned from mourning and who served in the same position; if no such people, then use those advanced scholars who finished internships at various ministries; if no such people, then use one advanced scholar, two recommended men, as well as one who qualified through donations (these four people form one "class", after assigning one class, the assignment started a new class with one advanced scholar, two recommended men and one by donations, known as the "rotation" method). Archivists at the Directorate of Education give priorities to those who returned from mourning and who served in the same position; if no such people, then rotate the assignments among a class (one advanced scholar, two recommended men, and one by donations). Registrars at Office of Communication, archivists at the Court of Imperial Sacrifices, registrars at Metropolitan Administration, registrars at Imperial Guard, registrars at Court of Imperial Entertainment, and archivists at Imperial Household Administration, these jobs should all appoint four from (imperial college) students by inheritance and students by donations, then followed by one promotion. Professors at the Directorate of Education, select from students by donations, followed by two promotions. Clerks at Office of communication, and archivists at Directorate of Education all follow one selection from students by donations, and one promotion. Archivists at Directorate of Education, commissionersin-chief at Interpreters' Institute, are for promotions. Editor assistants at Hanlin Academy, priorities are given to those return to the positions, if no such people, select two recommended men, two students by donations, and one promotion.

Among the provincial posts, circuit intendants use one promotion from supervising censors, one promotion from prefecture prefects, and one student by donation. Prefecture prefects promote two from, among those registered in the metropolitan area, (Han) ministerial directors and investigating censors by their seniority, and promote one from, among those registered in provinces, associated salt distribution commissioners, prefecture vice prefects, and Zhili department vice magistrates, and one student by donations ...

County magistrates, select five advanced scholars (if no one, then use advanced scholars who are intern instructors at Hanlin academy; if still no one, then use recommended men who finished their terms as instructors; If still no one, then use recommended men who are intern instructors; if still no one, then use recommended men who were recorded in the ministry, jie qu), two newly awarded advanced scholars (if no one, similar rule is used as above), five recommended men (if no one, then use those recommended men who finished their terms as instructors; if still no one, then use recommended men who are intern instructors), two officials who finished terms as [prefect] instructors (if two were interviewed by the emperor in the same date, then break ties by seniority, date of discussion, and date of registering in the ministry; if there is no one, then use recommended men instead; if still no one, then use recommended men who are intern instructors), one college student by imperial grace, one college student whose father died for the country, four college students by donations, and three promotions (these 23 people consist of one class). After the assignment of two classes, one student who was evaluated with high moral standard of fidelity is added; For advanced scholars, after two classes, one advanced scholar who serves as instructor is added; For recommended men, after two classes, one instructor from Xian an palace, and one instructor from Jing shan mountain, two tribute students who serve as instructors, one student by excellent performance, two recommended men who serve as instructors in various ministries are added. For the promotions, one Manchurian or Mongolian translator is added after one class, two Manchurian or Mongolian recommended men are added after two classes, and one Han military recommended men is added after three classes. Zhili department vice magistrates, use four recommended men, and one student by donations ... Prefecture instructors use only advanced scholars (if no people, then promote department and county instructors by their seniority). Department and count instructors, select four recommended men ..."

Compared to Ming, the range of officials who are subject to the lots-drawing procedure seems reduced for metropolitan posts but increased for provincial posts. In Qing³, for each type of job, a list of candidates was prepared by the Ministry of Personnel. Rule of avoidance was more clearly described in the assignment procedure. It was a general constraint for the assignment, including higher-ranked officials, re-appointment, etc. But the exceptions can be made for higher-ranked officials. Most details were already provided in the main paper. The Collected Statutes of Qing, volume 44, described the change in the lots-drawing procedure regarding related to the rule of avoidance (DQHD, 1886)

"Taoguang fourth year (1824), it was approved after discussions, for the people who draw lots in the monthly appointment, those who have home provinces to avoid draw first. If they still draw a job that needs to be avoided, remove this job and ask (the candidates) to draw another job. Until a (compatible) lot is drawn, let those who do not need to avoid home provinces to draw."

After the lots-drawing procedure, newly selected officials need to be validated by the emperor in a court audition. The emperor might still adjust the position, based on the information about the difficulty level of the job (prepared by the Ministry), and the interview. This is a way to improve the match quality. This adjustment depended largely on the dedication of the emperor, for instance more adjustments were made during Yongzheng periods (see Wang (2016) for more details on the adjustments based the compiled curriculum vitae of selected candidates).

References

- DONG, Q. (circa 1622). Shenmiao liuzhong zoushu huiyao (A collection of non-responded memorials to the emperor), vol. 54.
- DQHD (1886). Da qing huidian (The Collected Statutes of Qing), vol. 44.
- GONG, Y. (1997). Songdai guanzhi cidian (A dictionary of the Song civil service system). Zhonghua book company.
- and QIU, J. (2006). Mingdai dengke jinshi zongshu (a study on the total number of advanced scholars in min dynasty). Journal of Zhejiang University (Humanities and Social Sciences), 36 (3), 69–78.
- LBZZ (1614). Libu zhizhang (Regulations of Ministry of Personnel).
- LI, X. (1202). Jianyan yilai chaoye zaji (Miscellaneous notes on inner and outer politics since the Jianyan reign-period (1127-1130)), vol. 14.
- LIU, Y. (1996). Ming houqi cheqian fa shulun (a summary of lots-drawing method in late ming). Jiangxi shehui kexue (Jiangxi social science), 10.
- LU, R. (circa 1494). Shuyuan zaji (Miscellaneous notes in the bean garden), vol. 1.
- MAO, X. and JIN, S. (2005). Qingdai wen jinshi zongshu kao ding (research on the total number of advanced scholars (non-military) in qing dynasty). *The Qing History Journal*, 4, 63–77.
- MENG, E. (2003). Tang dengke jikao buzheng(Corrections on "Research on examination graduates of Tang dynasty"). Beijing Yanshan Press.
- MHD (1587). Ming huidian (Collected Statutes of Ming), vol. 2-13.
- MS (1739). Ming shi (History of Ming), vol. 71.
- MSLX (1569). Ming Xiaozong shilu (Veritable records of Ming Xiaozong Emperor), vol. 54.
- PAN, X. (2005). Mingdai wenguan quanxuan zhidu yanjiu (A study on the appointments of civil service system in Ming dynasty). Peking University Press.
- QDLBQXZL (1886). Qin ding li bu quan xuan ze li (Rules and Regulations for the Appointments by the Ministry of Civil Appointments), vol. 43.
- SHEN, R. (2016). Yuanchao jinshi jizheng (A comprehensive study of the advanced scholar degree holders in Yuan dynasty). Zhonghua book company.
- SS (1343). Song shi (History of Song), vol. 158.
- TAN, Q. (1621). Quoque (Discussions about the state), vol. 93.
- WANG, Z. (2016). Qingdai zhiguan renshi yanjiu (A study on the government personnel in Qing dynasty). Shanghai Bookstore Publishing House.

- WILL, P.-É. (2002). Creation, conflict, and routinization: The appointment of officials by drawing lots, 1594–1700. *Ming Qing Yanjiu*, pp. 73–121.
- XIA, L. and SHI, J. (1597). Zengxiu tiaoli beikao (A reference to additional articles of regulation), vol. 2.
- XU, S. (1984). Tang dengke jikao (Research on examination graduates of Tang dynasty). Zhong hua book company, reprinted.
- YAO, G. (1408). Yongle da dian (Yongle Ecyclopedia), vol. 14626.
- ZHANG, R. (1978). Cheqianfa kao (an investigation on the lots-drawing method). Dalu zazhi (The Continent Magazine), 57.
- ZHANG, X. (1987). A study on the oversupply of civil service candidates and officials in Song dynasty. Journal of Peking University (Philosophy and Social Sciences), 5.
- ZHU, J. (1638). Gujin zhiping lue (A review on the management of society), vol. 16.