The Power of Kith and Kin

Empirical Evidence of Kin among Public Administrators, Judges and Notaries in the Czech Republic*

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Abstract

There is marginal empirical evidence of kin among officials of the Czech Ministry of Foreign Affairs and strong evidence among Czech judges and notaries. The members of the Czech Bar Association serve as a control group for occupational following among lawyers - that is lawyers who have followed in their parents' careers. The Czech population is a reference group for naturally occurring consanguinity. These findings complement international research in occupational following, which is common in many professions, including civil service and the public administration of law. Occupational following in the bureaucratic offices of a liberal democracy is considered discriminatory, as it provides an unfair advantage and opportunities.

Keywords: nepotism; occupational following; in-group favouritism; Czech Republic; John Rawls; justice; isonymy

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1. Political Nepotism

Anthropological evidence shows that humans, like many other species (Silk 2009), tend to behave altruistically towards individuals with whom they are genetically similar (Rushton

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et al. 1984). In order to curtail exploitation and expediency (the problem of a 'free rider'), people are also inclined to show altruism towards and demand altruism from unrelated persons for reasons of similarity, reciprocity, mutual regard or equality (Boehm 1999; Jones 2000). These motivations lead to conflicting actions which are expressed in contemporary society as a conflict of loyalties when a public official prefers his kin (selective altruism) over the public interest (public duty) or when he establishes a dynasty through the transfer of knowledge and opportunities which are available exclusively to him. In public administration, it is not immediately clear where the borderline between occupational following (having the same occupation as one's parents) and nepotism is. However, a preference of kin is shown to be a drive of action in countries on both tails of global corruption ranks. It is as prevalent among local politicians in Denmark (Amore, Bennedsen 2013) as it is in Saudi Arabia (Kuznar, Frederick 2007). Political dynasties are documented in various liberal democracies (Kurtz 2001) and at all levels of government (Kurtz 1995; MacMullen 1999; Dal Bó et al. 2009). Families have been documented in the American judiciary (Kurtz 1997) and Italian public administration (Scoppa 2007). But the presence of family in public administration is not always a case of a simple occupational following as it borders on favouritism towards kin. It can even impede fairness, as is the case among medical doctors (Lentz, Laband 1989), farmers (Singell and Thornton 1997), NASCAR drivers (Groothuis, Groothuis 2007) or in all sorts of family businesses spanning China (Wong 1985) and America (Spranger et al. 2012). If there is a justification for anti-nepotistic sentiments in public administration, then it is rational to reject dynasties taking it over. And then, one is right to fear nepotism impeding transparency, checks and balances as different branches of power are quietly knitted back to one imperium through an insidious network of kin. In short, the adjudication of whether nepotism in public administration is good or bad hinges on determining whether the administration of liberal democracy is a family business or not.

For at least 2,400 years, it has been known that civic duties and duties towards kin can come into conflict. An early example is captured in Plato's *Euthyphro* (Cooper 1997: 1–16). There, Socrates meets Euthyphro who is on his way to visit the magistrates. Euthyphro's dilemma is as follows: either to respect his father, or to report his father's crime. Socrates makes it clear that Euthyphro is in conflict between his obligation as a citizen of Athens to seek justice with the magistrates, and his sense of filial piety. In a more recent and notable rendition of this ancient theme, Albert Camus is reported to have claimed that, in the face of terrorism in the streets of Algiers, he would defend his mother before the justice of the *pieds-noires*' struggle (Apter 1997: 499). The conflict of civic and familial loyalties must have been significant to make the 1957 Nobel Laureate denounce a just political cause and to prefer his family with such eloquence and at a time when he was awarded the prize for clarifying problems of the contemporary 'human conscience' (Nobel Foundation 2014).

The task of regulating the effects of nepotistic loyalties in a political system is old. In Europe, it can be traced back to Pope Innocent XII and his 1692 edict 'It befits the Roman Pontiff' in which he limited appointments of future Popes' relatives to offices of power in the Vatican and restricted their benefits. In the edict, the Pope claimed that in curtailing nepotism he acted 'according to laws of equity and justice' which suggests that nepotism must have impeded fairness and propriety at the highest level in the Vatican.[1] The prom-

inent historian of the Papacy, Owen Chadwick (1981: 301–302), notes that relatives often assisted European rulers in government because their loyalty was not doubted and because their interest was aligned with the hereditary ruler in preserving primogeniture and stability. Popes were faced with the need for a loyal bureaucracy to govern with, and they turned to their families, according to Chadwick. Additional concerns are cited, such as 'expediency,' 'moral right' to promote the Pope's family. The public apparently expected the Pope's family to maintain a representative standard of living, and would blame the Pope for negligence unless he prevented his family from living in poverty. This moral duty and need for loyalty in affairs of state was evident in the office of the *cardinal-nephew* who linked the sovereign Pope with the Curia and through whom many Popes ruled. In the mid-seventeenth century, Chadwick noted (303–304), this idea started to crumble with Pope Innocent X when his reliance on kin went awry. Subsequently, the word *nepotism* attained its sinister meaning. With Pope Innocent XII, the office of the secretary of state took off, and that of the *cardinal-nephew* started to diminish.

This chain of events did not mark a definitive end to solving the political conflict of conscience, accentuated by Camus as a love for his mother instead of his duty to the fatherland. In this paper, nepotism is understood as an expression of an allegiance to kin; it is a private commitment with a public overtone, a pledge which is difficult to break, and one whose effects permeate all bodies of the state. In the current understanding just as in the 17th century Vatican, nepotism takes a menacing turn. But to no surprise, millennia ago, it was the most cynical sophism of Ancient Greece which was recorded to invoke this 'demon' when one Thrasymachus scorned the *just* man for a *failure* to do his relatives an *unjust* favour while in office (in Plato's Republic I, see 343e or Cooper 1997: 988). This claim seems outrageous all the more because the sophist seems to have cast doubt over an imperative ingrained in all humanity: protecting one's folk must be good, or is it? John Stuart Mill (1879: loc. 797 ff.) replanted this indiscriminate drive to promote one's kith and kin into the modern context when he found a person blameworthy who gave his family and friends no preference in benefits over others *when* he does so without violating any other duty. Mill sets a political boundary to the primeval urge to prefer kin: impartiality, for Mills, takes precedence over partiality to kin when there is a need to consider and to respect rights of everyone, in the domain of the 'public interest.' Like Pope Innocent XII, Mill finds it proper to prefer kin up to the point when it risks violating principles of justice and equality.

2. Public Administration

A special case of kin being closer than friends, neighbours and acquaintance is the appointment of kin in public administration. This paper regards such nepotistic appointments to be unlike nepotistic appointments made in family-owned businesses. No family can arguably own a liberal democracy in the way a family can own and control the assets of a company. Then, added to the grief of the ones who are discriminated against, an appointment of kin in public administration seems to constitute a breach of trust to manage public affairs with

a regard to the public interest if this interest is indeed not to appoint officials by the virtue of their familial ties to holders of power. At the individual level, it is a conflict of in-group loyalties in which the patron sides with his own and his benefactor's interests, and when the patron harms the public despite being a member of this public himself.

Attempts to curtail nepotism in administration are not limited to the Papal states nor to late Renaissance Europe. Robert Marsh (1960) gathered evidence from China about constraints on nepotism in the imperial bureaucracy. During the reign of the last imperial dynasty, Marsh reports that despite the dominant Confucian culture centred on family, the Qing managed to develop a centralised bureaucracy based largely on appointed, salaried and non-aristocratic officials recruited from examinations of non-Manchu applicants. He demonstrated this by statistically correlating career promotion with achievement rather than family background when examining records of 572 Chinese civil servants and commanding officers. Even though, as Marsh argues, the family in China performed additional social functions to that in Europe – for example, members of one family were often held collectively responsible for each other's action – a conflict of familial interests with the imperial government resulted in punishment of the violator, be they at the highest level. For example, Marsh notes a 1781 case when the Emperor reprimanded the governor general of Fujian and Zhejiang for his failure to disclose his brother's corrupt behaviour, despite the existence of a Qing law which required relatives to *conceal* rather than report each other's crimes. Marsh claims that statutes like the 'law of avoidance' (Marsh 1960: 130) were used to control nepotism in the bureaucracy by banning officials who were related by blood or marriage from engaging each other at work and from serving in one province. Other controlling measures prevented loyalty to kin from impeding loyalty to the imperial government. These were principles of seniority, recommendation, mutual responsibility and collective punishment. Marsh however concludes that not all forms of favouritism present among Chinese officials of the Qing period were eliminated (Marsh 1960: 132).

In recent American history, the earliest record of rules against appointment of kin in state administration seems to be one made by Leon Aylesworth (1908) who noticed the then-unique and newly enacted anti-nepotistic statutes in Oklahoma and Texas targeting abuse of the power of appointment. The statutes banned state officials from appointing persons of close affinity or consanguinity, and the Oklahoma statute contained an avoidance clause which banned relatives from working together within the legislature, executive and judiciary. Richard White (2000) groups anti-nepotistic statutes in the USA into four classes in relation to the type of favouritism they prevent. These are: appointment of relatives by relatives, supervision of relatives by relatives, relatives working in one agency, and relatives in government contracting other relatives (White 2000: 109–110, and summary on pp. 112–113). Also, statutes limit officials in political office from promoting their kin. On the other hand, White records a sentiment spread in the public administration which seems to assert that if the hiring of relatives were allowed, it would improve the working environment in smaller agencies (White 2000: 111). White gives the example of the Central Intelligence Agency which seems to encourage the hiring of couples who are then vetted together and can discuss work-related issues without breaching confidentiality. Christine Reed and Linda Cohen (1989) reviewed American legal claims pertaining to contemporary anti-nepotistic rules, anti-discrimination statutes and the United States constitution. The rules forbid

spouses and other relatives from working in the same public sector organisations, and the rules forbid public officials from appointing their own relatives to offices and positions. Reed and Cohen conclude that judges usually uphold such anti-nepotistic rules unless they deem the rules to be too broad.

The United States federal bench itself is not completely immune from consanguinity, even though an anti-nepotistic statute pertaining to appointments of relatives made by federal judges was passed as early as 1887 (Solimine 2002: 565). In the 1990s, the effect of this statute was extended to cover a ban on consanguinity among judges serving on one federal court, and the evidence shows that only a few federal judges have been related (Solimine 2002: 573–574). Michael Solimine (2002) suggests that there is a general feeling of impropriety if related judges are seen to review or have control over each other in the judiciary (Solimine 2002: 577–578). Donn Kurtz (1997) adds a new angle to this in his book on *Kinship and Politics* (see also Kurtz 1995). Kurtz determined that 72 percent of the 107 United States Supreme Court justices (appointed by the President and confirmed by the Senate) serving between 1789 and 1988 had at least one relative in public office before, during or after the judge's term of service (Kurtz 1997: 7). Kurtz concludes that a majority of the justices have been members of prominent families in United States politics (Kurtz 1997: 82). Further, Kurtz shows that almost 40 percent of the justices were related to other judges in the state and federal judiciary (Kurtz 1997: 87). Kurtz was able to identify a common strategy in that one third of supreme court justices had ties to other political families by the marriage of a close relative (marrying a sister or daughter from another political family, or having their sister or daughter marry into one, see Kurtz 1997: 92). Kurtz argues that the method families use to perpetuate their positions in public office is in the transfer of intangible goods from one successful generation of politicians and justices to the next in the form of goodwill, voter loyalty, name recognition, contacts and family environment (Kurtz 1997: 28).

Intergenerational transfers of jobs are not limited to justices in the United States. In Italy, Vincenzo Scoppa (2009) has conducted research into the transfer of public sector jobs and concluded that having a father employed in the public sector increases the probability of his offspring's employment in the sector by 44 percent on average. For Scoppa, employment in the public sector is not analogous to employment in private companies in that public employment tends to offer better benefits to the employee. From this, Scoppa argues, it follows that parents are more likely to help their offspring to also be employed in public agencies. After he discovered the increased likelihood of offspring employment in the public sector, Scoppa concluded that it was contributed to by favouritism in employee hiring. The evidence of favouritism is supported by, for example, an observable drop in the public employment rates for offspring who move away from the region where their parents live (Scoppa 2009: 169). Further, the effect of fathers was not detectable for those who were most talented (best performing academically), but it was pronounced for those relatively lacking qualification. Also, the odds of employment for public officials' offspring were higher in southern Italy, which theoretically shows a higher degree of familial loyalties (Putnam et al. 1993: 178; these are regions where 'force and family provide a primitive substitute for the civic community.'). In addition, Scoppa observed that an intergenerational occupational following of offspring was considerably higher in public administration than in private

industry. Even though extensive analyses of the kind which Scoppa has performed are rare, favouritism in hiring kin has been recorded at various levels of public administration in Europe. For example, Andrew MacMullen (1999: 200) found appointment of kin as one of the reasons behind the collective resignation of Santer's *European Commission* in March 1999, albeit not the most prominent one.

The Czech Republic has been argued to be prone to political corruption on the ground of its communist past, tradition of political patronage, and a lack of engrained civil and liberal values (Reed 1996). Currently, the public procurement process is seen as creating unfair, criminal and ample opportunities for personal gain (Smith 2010) as some 40 percent of the public purse is redistributed to contractors (Ochrana, Maaytová 2012). František Ochrana and Alena Maaytová (2012: 735) argue that in the Czech Republic, costs of public procurement can increase due to a lack of procedural transparency, limited information on public tenders, detachment between procuring and consuming units, bribery and excessive bureaucracy. What constitutes acts of corruption is a nefarious manipulation of these inefficiencies to achieve an economic gain for a politician, civil servant or linked benefactor. Inefficient procurement (the difference between audited and incurred costs) indicates, for example, corruption in large scale construction works (Kenny 2008: 83). But, evidence of political corruption is however rather circumstantial and indirect. For example, several major Czech political parties reminisce about the practice known as rotten boroughs. This is the practice in which parties seem to aggregate sparse clientele for a party patron in order to enhance his or her candidacy and eventual political appointment (Klíma 2013: 217–219). The political patron can then arguably feel obliged to exert influence over public procurement to divert resources to his clients. Even though the extent of such processes is undocumented, it is reasonable to assume that such clientelism permeates along kinship ties.

It has been consistently observed in Western liberal democracies and in the USA that occupational following among judges (Kurtz 1997), public administrators (Scoppa 2007) and even politicians (Dal Bó et al. 2009) is frequent at the rates comparable to the high occupational following in family-run farms, for example. This, as well as historical evidence from the earliest democratic regimes in the central European region (Lipp 2005), suggest that occupational following in offices of power and state can be a strategy entrenched in both Czech habit and political culture. For this reason the Czech Republic is thought to show favouritism to kin in public offices and appointments. Further, occupational following observed in offices of a liberal democracy can be treated as evidence of discrimination, providing unfair advantages and opportunities which are handed down by those in power to their kin.

3. Isonymy

There are various ways to assess nepotism in a group of people. Some researchers rely on conventional survey tools such as questionnaires (Van Liefferinge, Steyvers 2009; Van Liefferinge, Devos and Steyvers 2012), others on genealogical data (Kurtz 1989), public regis-

ters of familial relationships and personal identification numbers (Amore, Bennedsen 2013; Sundell 2013), parish registers (Lipp 2005), or the study of identical surnames (see this section). The method used to estimate levels of nepotism among the elites considered here is based on the study of identical surnames, isonymy, which has a long tradition in human biology. In a 2003 review article, Sonia Colantonio, Gabriel Lasker, Bernice Kaplan, and Vicente Fuster show that isonymy had been used to assess, for example, migration, geographic origins, cultural homogeneity, ethnicity, inbreeding, marital illegitimacy and disease in 28 countries. Its remit has widened since (Darlu et al. 2012).

The study of pedigrees and parish records (Crow 1980; Ellis, Starmer 1978; Stevenson et al. 1983) has established that there is a correlation between the frequency of surnames in a population and levels of inbreeding, and that isonymy can serve as a proxy to determining the genetic variance of a given population in societies where surnames are inherited patrilineally, like genes (Lasker 1980), and under certain conditions (Gagnon, Toupance 2002). Several assumptions regarding this method have been explored and criticised, one of which is the assumption of monophyly (a single founding progenitor to all occurrences of one surname), which can seldom be justified in real populations (Rogers 1991; Rossi 2013: 409). But since the advent of molecular biology and genetic analysis, efforts to determine the exact coefficient between identical surname and the Y-chromosome (transferred from father to son) have gained substantial impetus (Balanovska et al. 2011). For example, King et al. (2006: 384) have concluded that, in the British population, 'sharing a surname significantly elevates the probability of sharing a Y-chromosomal haplotype and that this probability increases as surname frequency decreases.' Others have suggested, by analysing Y-chromosome haplogroups, that people in the Russian population who share a surname which is common across geographically diverse groups (so that the surname indicates a polyphiletic origin) still come from a limited number of founder stock within each group (Balanovska et al. 2011: 430). That is, men with a common surname (a high overall frequency) who live in one location are likely to be genetically similar. Currently, it is argued that a monophyletic origin of surnames is present in many groups, with the notable exception of China (Colantonio et al. 2003: 789; Jobling 2001; King, Jobling 2009: 353–354; Martartg-González et al. 2012; Sykes, Irven 2000; for the Chinese case see Liu et al. 2012).

Though the study of isonymy cannot determine exact levels of inbreeding in most populations (Crow 1980; Ellis, Starmer 1978; Rodriguez-Larralde et al. 2003), it has been suggested, for example in forensic investigation, that DNA-based surname prediction can be applicable in any society with diverse patrilineal surnames of reasonable time-depth (King et al. 2006: 387; King, Jobling 2009: 356–357), thus creating probabilistic associations between genetic makeup and cultural markers of ancestry in the form of surnames (Presciuttini et al. 2006). In the Czech Republic, Stenzl et al. (2013) are currently conducting one such research project to determine correlations between parts of genes and corresponding surnames. It has also been established that isonymy can be used to measure the relationship between any two groups of people (Lasker 1980: 530; Lasker 1985: 22–24; Rodriguez-Larralde 2003: 281). Methods examining isonymy can measure the relative genetic relationship between groups when a single surname progenitor is assumed, relationships through the female and mixed lines are proportionate to relationships in the male line (Lasker 1977) and when there is a limited flow of immigration into the groups (Crow 1980: 13).

The use of isonymy studies in political science is uncommon. However, by studying isonymy in the United Kingdom for example, it has been determined that the frequency of surnames is linked to geographic distributions among the UK electorate (McElduff et al. 2008). In this research, plotting Yule's *K* (a measure of diversity) against the level of surname frequencies indicated outlying electoral districts. By exploring these cases, researchers discovered cleavages at the constituency level in terms of ethnic origin and a high level of ethnic group endogamy combined with sustained immigration in the outlying districts. Such observed incidences allow researchers to discover geographic areas of past or future political tensions along ethnic lines.

In the Republic of Ireland, Byrne and O'Malley (2012 and 2013) have used a statistical analysis of surname frequencies and genealogies to help explain the Irish party system, which is theoretically anomalous and cannot be understood by referring to the established comparative analysis of cleavages rooted in national, cultural, religious or industrial revolutions. Byrne and O'Malley have showed a link between surnames of members of the *Dhav Éireann* (the lower house of the Irish parliament) and group divisions which can be traced to the 12th century. Byrne and O'Malley concluded that social divisions pertaining to ethnic self-identification, and resulting in a particular party system, can be older than previously suggested. These old divisions can be influential in current politics even when they are no longer observable among the electorate but perpetuate as sets of particular values via patrilineal transmissions, like family names.

In nepotism research, Stefano Allesina has used isonymy as an indicator of consanguinity when he demonstrated a high likelihood of nepotism among 61,340 Italian scholars (Allesina 2011; Allesina 2012; Ferlazzo, Sdoia 2012). He found that Italian professors feature too few unique family names ('significant paucity') which cannot be accounted for by chance. This indicates that surnames of Italian professors are shared more often than is possible by chance. In the data, Allesina identified a theorised north-south trend with the likelihood of nepotism increasing with closeness (i.e. a decreasing distance of professors increases their odds in featuring an identical surname), and he accounted for the geographic clustering of last names showing a higher likelihood of shared surnames in Sicily. Fabio Ferlazzo and Stefano Sdoia (2012) proposed to check Allesina's method by analysing the *first name* frequency distribution among the academics which is theorised to be a result of chance, unlike their surnames. In his response, Allesina (2012) confirmed this hypothesis by controlling for an uneven representation of women and men in Italian academia. For many scholarly disciplines, Allesina found that the probability of surname-sharing is enhanced when professors work in the same institution or sub-discipline. Prior to Allesina's research, Ruben Durante, Giovanna Labartino and Roberto Perotti (2011) had indicated an increase of nepotism through a study of surname homogeneity among Italian academia between 1988 and 2008 which incurred in areas with a 'low civic capital' and due to decentralisation of hiring policies at universities. By using the same isonymic method, Anders Sundell (2013) found that the level of nepotism in the Swedish civil service decreased among 9,126 civil servants between 1790 and 1925.

Anthony Greenwald and Eric Schuh (1994) have shown that surnames can serve as a base for analysing an ethnic bias among North American scholars (see also Oates, Wilson 2002). An example of an early application of isonymy to determine ethnic dynamics

in central Europe is used by Daniela Siváková and H. Walter (1996) who studied identical surnames to assess exogamy rates between German, Hungarian and Slovak populations of *Nižný Medzev*. In Austria, Italo Barrai et al. (2000) used isonymy to determine a correlation between distinct genetic make-up and geographical distance. And in western Europe, the occurrence of identical surnames coded by location has been found to correlate geographically with nation states and local languages (Scapoli et al. 2007). Isonymy has also been used for studying occupation following in politics by Dal Bó et al. (2009).

Overall, an examination of isonymy can provide a reasonable indicator of consanguinity and density of kin as, ultimately, political nepotism leads to consanguinity, that is, to the sharing of identical genes. Since the study of isonymy does not rest on an examination of a causal nexus between genetic makeup and preference of kin, this paper assumes that consanguinity is a result of nepotism in such a situation where there are means, motive, and opportunity. Consanguinity among public officials would then constitute evidence of political nepotism. This is the *consanguinity hypothesis* considered here.

4. Evidence

Parts 1 and 2 of section 43 of the recently promulgated *Civil Service Act* (2014) states: 'Interrelated civil servants must not be made mutually subordinate, must not control each other financially and must not audit each other's accounts [...] with the exception of the Foreign Office [...].' It turns out that this dispensation to nepotism for the Foreign Office civil servants was not present in the original bill (Sklenur et al. 2014, as section 36 of this bill which became section 43 in the law), and it was introduced into the bill during the drafting process by the time the bill passed the Constitutional and Legal Committee of the Parliament's Chamber of Deputies (*Ústavně právní výbor* 2014, as section 44 of this bill which became section 43 in the law). At no subsequent legislative stage was this dispensation challenged, and thus nepotism entered the body of law on 6 November 2014.

This statute establishes a reasonable expectation that nepotism will increase in the Czech Foreign Office. Therefore it is useful to measure nepotism among these officials before the dispensation entered force on its commencement date of 1 January 2015 (*Civil Service Act* 2014, section 207 on p. 2688). As a benchmark, this paper examines empirical evidence of kin among other public officials, judges and notaries whom, for example, American evidence also makes prone to consanguinity. Recently, Šípoš and Spáč (2013) of *Transparency International* have discovered that 20% of Slovak judges (277 of 1,383 judges) self-reported other relatives working in the Slovak judicial system. Since Slovakia and the Czech Republic share a similar legal and cultural heritage, it is reasonable to assess the roster of Czech judges for consanguinity. The members of the Czech Bar Association (attorneys) serve as a control group for determining occupational following present in the legal profession. The Czech population surname frequencies then present the reference group for consanguinity which occurs naturally in any group of any size drawn randomly from this population. The population also serves as a proxy for estimating hypergeometric probabilities of surname distributions observed among the examined groups.

There are six datasets primed for analysis. The Czech population surname frequencies have been obtained from the *Czech Ministry of Interior* (2013) which makes surname counts of registered Czech Republic citizens available on the internet. The data were obtained in 2013. The Czech population first name frequencies were obtained in 2014 (*Czech Ministry of Interior* 2014). The roster of all Czech Republic judges was obtained from the *Czech Ministry of Justice* (2014). The list of notaries is published by the *Notarial Chamber of the Czech Republic* (2014). This list contains names of all notaries registered with the chamber and licensed to practice in the Czech Republic. The *Czech Bar Association* (2014) provides the list of attorneys and junior attorneys who are registered to practice law in the Czech Republic. In addition, the *Czech Ministry of Foreign Affairs* (2014) released the list of its employees' surnames as of 6 May 2014 upon a request of access to information according to Act 106/1999 Coll. All reference and observed surnames and first names are broken down into their constitutive parts as some people may have more than one surname and more than one first name. This ensures that compatible data are analysed, as this method measures and estimates the frequency of cultural markers of genetic make-up (surnames) in a group as the object of analysis and not the bearers of such cultural and genetic information (people).

The operational hypothesis is that a high incidence of identical *surnames* (isonymy) occurs in a group with frequent kin-based relationships while at the same time, incidence of identical *first* names observed in this group is random. This fulfils a condition on consanguinity determined from isonymy and stipulated by Ferlazzo and Sdoia (2012) and demonstrated by Allesina (2012). This operational hypothesis is tested for the benchmark group of the legal profession which contains judges, notaries, senior attorneys and junior attorneys. Then, consanguinity is tested *separately* on the surname frequencies of judges, notaries, attorneys and employees of the Foreign Office. The probability of observed surname and first name frequencies shared in a group is estimated through random sampling. It entails drawing typically 5,000 or 20,000 random samples from the Czech population. The draws are done without replacement by using the *sample* procedure in the R environment (*R Core Team* 2014). Each sample has a size which is identical to the corresponding observed group. Then, all surnames or first names in each corresponding sample are assigned a *rank 1* (when a nominal/surname is unique) or *rank 2+* (when a nominal is shared among at least two members of this group). Then, these ranks are averaged across the randomly achieved samples. The ranks tend to gravitate around a mean typical for an observed group of the same size, due to the law of large numbers. From this, a probability density function is estimated for each group as it cannot be expected to be strictly normal. This function then serves as a reasonable estimator of the probability of *rank 2+* surnames or *rank 2+* first names in a group. If a density function cannot be determined due to numerical instability, the probability of observing a *rank 2+* share is estimated directly from the randomly sampled draws by determining the size of the critical region from the number of random draws which fall into it. The critical region is set to be the upper tail (as this hypothesis seeks to determine a high incidence of isonymy) and covers the area of 0.05 percent probability. If the observed sum of *rank 2+* surnames falls into this critical region then consanguinity in this group cannot be rejected. Then nepotism is understood to be confirmed in this group.

Table 1: The Legal Profession: Judges,[a] Notaries,[b] Attorneys[c]				
	First Names		Surnames	
	Observed	Expected	Observed	Expected
rank 1	365	392	7,882	8,420
rank 2+	18,105	18,078	10,614	10,076
	n_i	μ_i	n_i	μ_i
Source: [a] Czech Ministry of Justice 2014; [b] Notarial Chamber of the Czech Republic 2014; [c] Czech Bar Association 2014.				

First, it is necessary to determine whether *first names* are distributed randomly among Czech legal professionals. Table 1 shows that there are 365 first names which are unique among judges, notaries and attorneys, and that there are 18,105 of them who share at least one first name $\{n_i\}$. Based on 5,000 random draws of samples of 18,470 first names, the expected (mean) *rank 1* is 392 first names and expected (mean) *rank 2+* is 18,078 $\{\mu_i\}$. It remains to be seen whether the distance between observed *rank 2+* of 18,105 and expected *rank 2+* of 18,078 is a result of chance. The Shapiro-Wilk test of normality of the *rank 2+* figures in the 5,000 random samples (procedure *shapiro.test* in R, see also Ricci 2005: 20) returns the value of 0.15 which does not fall into the critical region of 0.05 or less for this test's null hypothesis. Therefore it cannot be rejected that the 5,000 randomly generated sets of *rank 2+* are not distributed normally. Thus, a goodness-of-fit test based on Pearson's chi-squared statistic (Agresti 2007: 35 and 212) can be performed on the first name rank frequencies. This test examines the distance between observed and expected frequencies. A large distance provides evidence against the null hypothesis while the null is the case when observed and expected frequencies are identical, and the value of the statistic is 0. Agresti (2007: 212) notes that the p-value is the chi-squared right-tail probability above the observed X^2 value, and that expected frequencies of $\{\mu_i \geq 5\}$ result in a sufficient approximation. The particular probability density then depends on the degrees of freedom (*df*). In Table 1 and for the first names, there is 1 *df*, and the R procedure *chisq.test* returns $X^2 = 1.9$ and p-value = 0.17. The critical value for rejecting the null hypothesis is 3.8 at the 0.05 level in a chi-squared distribution of 1 *df* (R procedure *qchisq(p = 0.95, df = 1)*). The observed X^2 statistic is smaller than the critical value and it does not fall into the critical region. Therefore, it cannot be rejected that first name frequencies of judges, notaries and attorneys are drawn from the distribution of the Czech Republic population first names randomly. The distance $\{n_i - \mu_i\}$ is too small. Czech legal professionals share identical first names as often as can be achieved by chance. In this, the first part of the test by Ferlazzo and Sdoia (2012) is confirmed, the observed first names of legal practitioners are a result of chance.

Then, Table 1 lists frequencies of observed and expected surnames of judges, notaries and attorneys. There are 7,882 surnames which are unique among judges, notaries and attorneys, and there are 10,614 of them who share at least one surname $\{n_i\}$. Based on 5,000 random draws of samples of 18,496 surnames, the expected (mean) *rank 1* is 8,420 surnames and expected (mean) *rank 2+* is 10,076 $\{\mu_i\}$. It remains to be seen whether the

distance between observed *rank 2+* of 10,614 and expected *rank 2+* of 10,076 is a result of chance. The Shapiro-Wilk test of normality of the *rank 2+* in the random samples returns the value of 0.87 which does not fall into the critical region of 0.05 or less for this test's null hypothesis. Therefore, it cannot be rejected that the 5,000 randomly generated sets of *rank 2+* are not distributed normally and a goodness-of-fit test based on Pearson's chi-squared statistic can be performed on the surname rank frequencies to examine the distance between observed and expected frequencies. A large distance provides evidence against the null hypothesis while the null is the case when observed and expected frequencies are identical, and the value of the statistic is 0. Also in this case, the p-value is the chi-squared right-tail probability above the observed X^2 value, and expected frequencies of $\{\mu_i \geq 5\}$ result in a sufficient approximation. The particular probability density then depends on the degrees of freedom (*df*). In Table 1 and for the surnames, there is 1 *df*, and the R procedure *chisq. test* returns $X^2 = 63.2$ and p-value < 0.01. The critical value for rejecting the null hypothesis is 3.8 at the 0.05 level in a chi-squared distribution of 1 *df*. The observed X^2 statistic is larger than the critical value and it falls into the critical region. Therefore, it can be rejected that surname frequencies of judges, notaries and attorneys are drawn from the distribution of the Czech Republic population surnames randomly. The distance $\{n_i - \mu_i\}$ is too large. The direction of the difference between observed and expected (mean) *rank 2+* figures is confirmed. Czech judges, attorneys and notaries share identical surnames more often than can be achieved by chance. The frequencies of surnames observed among Czech legal practitioners cannot be expected to be a result of chance with a high degree of confidence. Further, this is evidence of Czech legal professionals holding identical surnames more frequently than in the Czech population at large.

In this, the second part of the test devised by Ferlazzo and Sdoia (2012) is also confirmed: while the observed *first* name frequencies of Czech legal practitioners can be a result of chance, the observed *surname* frequencies of legal practitioners are not a result of chance. The surname frequencies of identical surnames among legal practitioners depend on other processes than randomness, and therefore the frequencies can indicate consanguinity. Should genetical assumptions of isonymy hold, then the observed surname frequencies provide evidence of a consanguinity larger than that which is present in the overall population. There is consanguinity indicated among legal practitioners because the observed number of surnames shared among two or more people (10,614) is significantly larger than the expected number of surnames to be shared by chance (10,076). As an occupational following can be expected in the legal profession, and as occupational following will inevitably result in an increased genetic homogeneity, it is expected to find fewer unique surnames than expected through isonymy. This is the case among Czech legal practitioners.

In the main analysis, it is to be determined whether there are grounds for the claim that there is nepotism present among Czech judges, notaries, attorneys, and the Foreign Office civil servants. For reasons of conciseness, the probability distributions of *rank 2+* frequencies are estimated from randomly drawn samples of surnames. Then, the expected value (the mean *rank 2+*) is compared to the observed value of *rank 2+* among judges and attorneys while the cut-off points of the 0.05 percent probability region are estimated. In the R environment, the procedure used to fit gamma probability distributions is *fitdistr* in the MASS package (Venables, Ripley 2002), and *starship* in the GLD package (King et al.

2014) is used for fitting generalised lambda distributions. The method used to fit data to a probability distribution broadly follows suggestions published in a paper by Ricci (2005). Notaries and Foreign Office employees cannot be reliably fitted into any continuous distributions considered above. The p-values and cut-off values in these two datasets are inferred from surname frequencies of *rank 2+* occurring in random samples, that is, from mass distribution functions.

Table 2: The Main Findings for *rank 2+* (two or more persons share one surname)

Dataset	Consanguinity	n_{2+} relative to μ_{2+}	dist. in 0.05% of total	in %
Attorneys [a]	indicated	8,026 > 7,656	256 of 14,958	1.72
Judges [b]	indicated	974 > 851	61 of 3,094	1.97
Notaries [c]	indicated *	58 > 34	11 of 444	2.48
Foreign Office [d]	marginal **	460 > 430	-6 of 1,987	n/a

Notes: *The p-value of observed rank 2+ or larger is < 0.0013; **The p-value of observed rank 2+ or larger is < 0.0992.

Source: [a] Czech Bar Association 2014; [b] Czech Ministry of Justice 2014; [c] Notarial Chamber of the Czech Republic 2014; [d] Czech Ministry of Foreign Affairs 2014.

In Table 2, there is a summary of the main findings. Among attorneys' surnames, there are 8,026 people who share their surname with at least another attorney (*rank 2+*). This is larger than the expected value of *rank 2+* (mean *rank 2+* in random samples) which is 7,656. After a fitting probability density function is found for these random samples, it turns out that among the observed attorneys there are 256 attorneys who are above the cut-off value which signifies the area of 0.05% or smaller probability of occurring by randomness. If there were 256 fewer attorneys who shared their surnames with other attorneys, the observed *rank 2+* surname frequency would just pass above the 0.05% threshold and could be claimed to occur by chance. As this is not the case, Czech attorneys share surnames more frequently than is expected by chance. If isonymy assumptions hold, Czech attorneys are found to be more genetically homogeneous than is possible by chance. This is expected due to occupational following. A relative saturation of interrelated persons among attorneys can be inferred from the share of the *rank 2+* attorneys within the upper 0.05% domain, which is 1.72%. As for Czech judges, after a reasonable fit is made, 61 judges who share surnames are found in the 0.05% probability domain which returns a relative saturation of nepotism at 1.97% which is similar to the 1.72% of the attorneys. Among the Czech notaries, likewise, 11 notaries who share surnames are found in the upper tail domain of 0.05%, and thus the relative saturation of nepotism among notaries is estimated at 2.48% which is similar to attorneys and judges.

Now, there are 460 Foreign Office civil servants who share their surnames with at least one other civil servant. The expected value of this *rank 2+* is 430 which is lower than the observed 460 persons. The p-value of the 460 or more *rank 2+* people inferred from 20,000 random samples is smaller than 0.0992. Therefore, the cutoff value of the 0.05 domain is larger than 460 (it is inferred to be 466). Therefore, the observed surname frequencies of the civil servants barely do *not* pass the 0.05% threshold set for indicating consanguinity,

and a relative saturation of nepotism cannot be computed for them. It is noteworthy that the observed number of surnames shared among two or more civil servants in the Czech Foreign Office is approaching the upper tail of the random distribution (determined from the 20,000 random draws). This might indicate a tendency to prefer relatives in employment even before the *Civil Service Act* (2014) came into force; and it constitutes the grounds to conclude that there is evidence of marginal consanguinity among the civil servants.

Table 3 contains model parameters, where applicable, which relate to 5,000 random draws (legal practitioners' first names and surnames, attorneys and judges) and 20,000 random draws (notaries, Foreign Office civil servants) with replacement from the population of Czech first names (legal practitioners' first name) and surnames (all other datasets). The $\{n\}$ is the observed number of first names or surnames in each dataset. The $\{n_1\}$ is the number of unique surnames/first names or *rank 1*, and the $\{n_{2+}\}$ is the number of surnames/first names shared between two or more people or *rank 2+*. The $\{\mu_1\}$ is the expected (mean) number of *rank 1*, and the $\{\mu_{2+}\}$ is the expected (mean) number of *rank 2+*, that is surnames/first names shared between two or more people. The $\{f(\mu_{2+})\}$ signifies the function which was found to fit the randomly drawn data, and the p-value of this fit is shown in the last column. The fit is measured by the Shapiro-Wilk normality test and the Kolmogorov-Smirnov test appropriate to each distribution function. The null hypotheses of both tests reject the proposed fit; and none is rejected in Table 3. The random draws pertaining to notaries and Foreign Office civil servants have not been fitted with a reasonable normal, gamma or generalised lambda distribution function, and therefore the number of random draws was increased to 20,000 and the values estimated in Table 2 were computed directly from these random draws.

Table 3: Dataset by Model Parameters and Probability of *rank 2+* Fit

dataset	n	n_1	n_{2+}	μ_1	μ_{2+}	$f(\mu_{2+})$	*rank 2+* parameters	p-value of fit
Legal first n.[a,b,c]	18,470	365	18,105	392	18,078	normal	mean = 18,077.85 sd = 17.76	0.15 (Shap-Wilk)
Legal surnames [a,b,c]	18,496	7,882	10,614	8,420	10,076	normal	mean = 10,075.73 sd = 73.08	0.87 (Shap-Wilk)
Attorneys [a]	14,958	6,932	8,026	7,302	7,656	gamma	shape = 1.2820 scale = 1.6744	0.77 (Kom-Smir, ties)
Judges [b]	3,094	2,120	974	2,243	851	gld	λ_1 = 851; λ_2 = 0.05; λ_3, λ_4 = 0.1	0.27 (Kom-Smir, ties)
Notaries [c]	444	386	58	410	34	n/a	inferred from 20,000 draws	n/a
Foreign Office [d]	1,987	1,527	460	1,557	430	n/a	inferred from 20,000 draws	n/a

Source: [a] Czech Bar Association 2014; [b] Czech Ministry of Justice 2014; [c] Notarial Chamber of the Czech Republic 2014; [d] Czech Ministry of Foreign Affairs 2014.

5. Conclusion

Among the Czech legal practitioners, the frequency of *first names* shared among two or more lawyers was shown to be random, while at the same time the frequency of *surnames* shared among two or more lawyers was shown not to be a result of chance. Both findings had been expected as first names are not usually inherited from father to son, while surnames are. The legal profession can be expected to show effects of occupational following, and this is demonstrated in a genetic homogeneity larger than is possible through a random selection of the Czech population.

Then, there is consanguinity indicated among each group of legal practitioners, that is among Czech attorneys, judges, and notaries, since frequencies of identical *surnames* shared among two or more members within these groups is larger than expected by chance. The observed frequencies are not a result of randomness. Foreign Office civil servants are found to approach the threshold indicating consanguinity within their group, but it can still be considered a result of chance or methodological limit. Therefore the civil servants are considered to show *marginal* consanguinity. The nepotistic dispensation for these civil servants enacted in the *Civil Service Act* of 2014 is expected to contribute further to an increase of isonymy (shared surnames), and therefore genetic homogeneity, among the civil servants.

6. Discussion

Altruism may have emerged from an evolutionary dynamic of the human species. Now, it is an integral part of society. This evolutionary altruism contributes to feelings of belonging to a group and often this feeling finds expression in ethnicity, kin and family. Altruism requires trust, and Jong-Sun You (2005) finds that when fairness increases then ethnicity loses significance in many societies worldwide. This 'fair altruism' then has a political overtone because trust in strangers requires the trust in ethnicity, kin or family to diminish. Society adds to this blend, as there are pressures to preserve altruism through the imposition of moral norms of a particular moral sense. For some, these norms contribute to the preferences shown to family and to committing nepotistic acts for reasons of altruism; for others, the moral sense requires fairness in income distribution, political engagement and administration of law, also done for reasons of altruism.

Frequent kin-based relationships among political, civil servant and judiciary elites constitute a basis for political nepotism. It is hardly possible to establish whether any given civil servant would or could always promote his or her kin, but the frequency of such relationships among public office holders indicates a structural risk to liberal democracy. The risk is that when loyalty to kin results in preferential treatment, it becomes incompatible with liberal moral doctrines such as equal access to positions of power (Rawls 1999). Loyalty to kin poses other kinds of structural risks to democratic regimes which rely on the principle of division of power, for example when mutually loyal relatives occupy positions of power which the system assumes are occupied by political actors who are in competition with one another.

For John Rawls, it seems plain that rational plans of individuals living in a society ordered according to principles of justice will be consistent with those principles, otherwise the plans, preferences or moral values are irrational (Rawls 1999: 373). This makes familial values of affection and friendship, though prominent in people's lives, secondary to justice as fairness as they are realised within the boundary which justice permits. Rawls claims that sometimes there is a temptation to act unjustly when people want to attain and preserve familial values. There is nothing inherently unjust in the values, according to Rawls, so it seems that it is the act of digression which makes acts motivated by these values unjust at the point of trespassing on the domain of justice.

From the systemic point of view, Rawls finds that some effects of familial values contribute to justice: attachments and associations which are harboured in one's family can exaggerate feelings of guilt when one acts against his sense of justice and injures people in his community as if injuring members of his family (Rawls 1999: 391). The guilt based on affections leads one to act in accordance with Rawls's principles of justice. This exaggeration of obligation seems always to apply when one is acting in order to promote the welfare of those to whom he is attached. This then provides insight into why any conflict between one's civic and familial duties can be intensive, emotional and difficult to resolve for an individual. Rawls sets a limit to the legitimacy of these feelings when he claims that the shame for immoral acts and guilt of injury involve one's relation to others when these are an expression of his acceptance of principles of justice. But in Rawls's account of a conflict between civic and familial values, a discrepancy seems to develop because feelings of guilt and moral decrepitude seem relative to the distance of emotional attachments and less to the principles of justice. Guilt always seems to occur when one favours those to whom he is less emotionally attached over those who are closer to him. Then the fear of guilt for breaching Rawls's principles of justice (a breach of duties to those who are emotionally more distant) will perhaps not guide everyone to behave in accordance with the principles because, as Rawls admits, they are already tempted to act unjustly in order to improve the immediate welfare of their dependents, that is, they are tempted to perform nepotistic acts, for example. In theory, the nepotistic act can be understood to be an expression of an intense loyalty to family realised at the cost of neglecting less intensive loyalty to the community ordered according to Rawls's principles of justice.

When the theory fails to advise civil servants, judges and notaries against affections to their kin, what remains are systemic checks to prevent nepotism from impeding the 'fair altruism' of promoting the welfare of others who are not one's family. Researchers have drawn a conceptual distinction between nepotism and discrimination, such as Chaim Fershtman, Uri Gneezy and Frank Verboven (2005; see also Hofmeyr and Burns 2012) in their comparison of interactions between the Flemish and Walloons of Belgium, and the secular and ultra-orthodox Jews of Israel. The Flemish and the Walloons were found to treat members of their own societies as anonymous individuals, but were opposed to the other ethnicity; they were found to discriminate against the other ('discrimination against'). On the other hand, religious Jews based their biased treatment of anyone else, including secular Jews, on their affinity with other orthodox Jews but not with others ('discrimination in favour'). When such in-group favouritism occurs, 'anonymity rules,' which are designed to create impartiality by abolishing information about group affiliation (p. 372), fail. In light of these

observations, such anonymity rules are effective against discrimination only in the case when discrimination is based on the knowledge of affiliation with a group which is being discriminated against. Once the knowledge of one's own group affiliation is the very motivation for discrimination in favour of some, anonymity rules are ineffective. Anonymity rules can even hurt the economic performance of such nepotism-riddled systems. Fershtman, Gneezy and Verboven theorise a situation where mutual trust is required to increase payoff in a market. Anonymity rules can lead to a decrease of overall trust because actors do not know the group affiliations of others and they cannot discriminate in favour of their group (i.e. cannot engage themselves in nepotism) when everyone is treated by everyone as an anonymous individual. Either way, rather than evidence for social capital, assets created in networks of consanguinity seem better understood as in-group favouritism or instances of political nepotism. This in-group favouritism functions differently from strategies which discriminate 'against a group.' For this reason, a preference of kin in public appointments is persistent as it defies common anonymity rules which are usually thought to prevent discrimination. A solution to this is to attempt to make offices of power more accountable and access to them fairer. This suggestion is contrary to the nepotistic dispensation enacted in the Czech *Civil Service Act* (2014).

The Czech Republic data show no exception to this case. Occupational following is confirmed for attorneys, and also among judges and notaries who can be considered to occupy positions of power that are subject to the constraint imposed by John Rawls's (1999) difference principle. The same is true, to a marginal degree, with the Czech Foreign Office civil servants. The difference principle argues that it is only fair to agree to only those differences in rights, liberties, opportunities, incomes and wealth which contribute to the 'primary social goods' of the least advantaged. Now, will the poorest and least advantaged members of Czech society find it fair that their civil servants, judges and notaries who occupy public offices and administer the law are more interrelated than is possible by chance?

Footnotes:

1. See the Latin phrase 'iuxta aequitatis et iustitiae leges' mentioned in the preamble of this papal bull (Innocentius XII 1870); the name of this edict is the Latin incipit *Romanum decet Pontificem*.

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