Who Speaks at the Court? Bench Roles, Language, and Judicial Voice at the European Court of Human Rights

Ezgi Siir Kibris* Cantay Caliskan†

November 22, 2026

Abstract

Judges at the European Court of Human Rights (ECHR) have equal votes. Their participation in public hearings varies considerably. We link recordings of 252 Grand Chamber hearings from 2007 to 2026 to official biographical records and data on judges' states of election. We observe 4,254 sittings by 140 judges and attribute 2,106 question units to named judges using time-stamped transcripts. We model whether a judge asks at least one question using a linear probability model with hearing fixed effects and standard errors clustered by judge and hearing. On the same bench, the national judge of the respondent state is 23.1 percentage points more likely than colleagues to ask a question. The difference persists when we add judge fixed effects, comparing the same judge across hearings in different roles. Judges with stronger documented proficiency in the language of the pleadings and judges elected in respect of states with higher liberal democracy scores also ask more often. Longer-serving judges ask less often than newer colleagues. Comparisons across career stages for the same judges yield little evidence of a decline in questioning over time. The estimated difference between women and men is small and imprecise. The most active tenth of judges accounts for 37 percent of all questions.

Keywords: European Court of Human Rights; judicial behavior; oral hearings; international courts; computer vision; audio analysis

*Rochester Institute of Technology. Email: eskics@rit.edu

†University of Rochester. Email: cantay.caliskan@rochester.edu

1 Introduction

"Give every man thy ear, but few thy voice."

— Polonius, in William Shakespeare, *Hamlet*, act 1, scene 3

On 26 September 2018, the Grand Chamber of the European Court of Human Rights (ECHR) heard *N.D. and N.T. v. Spain*, a case about the immediate return of migrants who had climbed the border fences at Melilla. After the parties and intervening governments presented their arguments, the President invited questions from the seventeen judges on the bench. Of those judges, 9 asked a total of 22 questions. The judge elected in respect of Spain questioned both the applicants' lawyers and the Spanish Government. Eight judges, including the President, asked no questions. Figure 1 shows when the judges asked questions and whom they addressed.

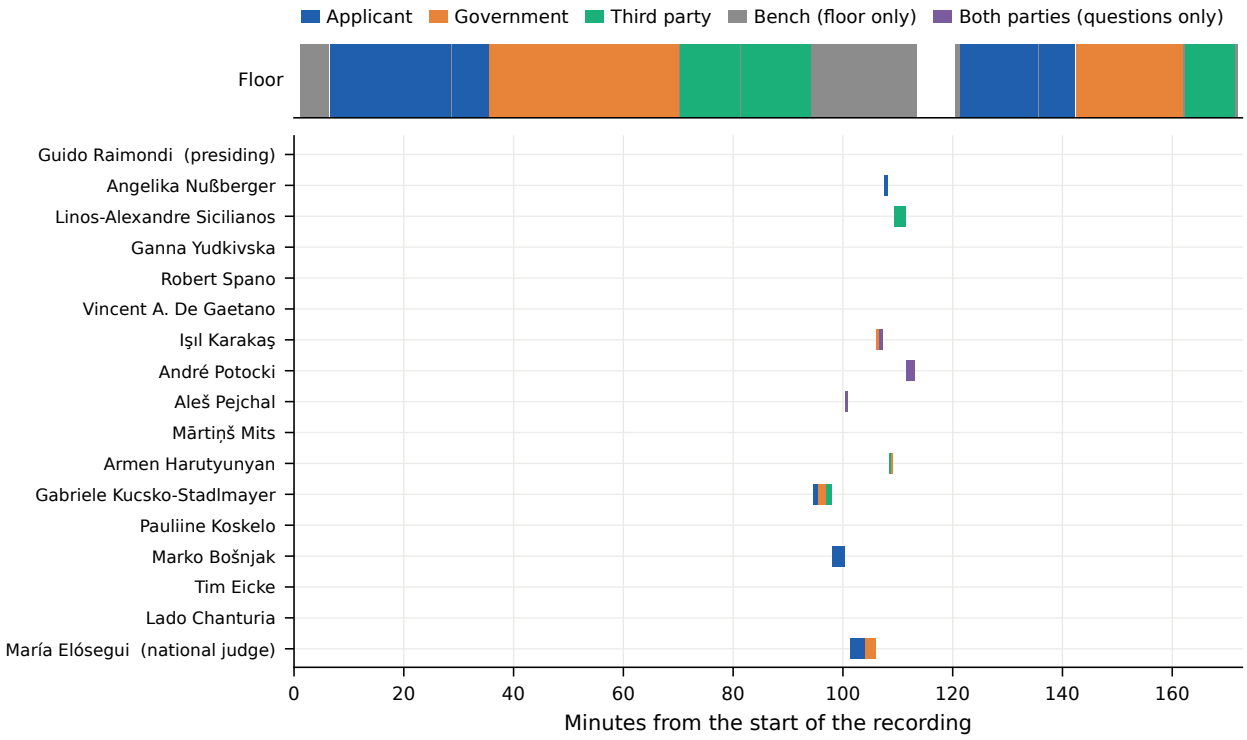

Figure 1: Questioning in one Grand Chamber hearing. *N.D. and N.T. v. Spain*, 26 September 2018. The top strip identifies which side held the floor. Each row below represents a sitting judge, in order of precedence. Each mark represents a question unit, with color indicating the addressee.

The eight judges who remained silent had the same voting rights as the nine who spoke. Each judge is elected in respect of a member state of the Council of Europe, sits in an individual capacity, and has one vote in deliberation. The hearing is the only stage of the Court's work at which the public can observe the judges taking part on a formally equal footing. In a typical hearing, about one sitting judge in five asks a question.

We ask which judges take the floor during the question round. The Grand Chamber brings together lawyers trained in different legal systems who came to Strasbourg from national courts, universities, ministries, and the bar. They work in two official languages, each of which is the first language of few judges. The states in respect of which they were elected have very different political histories. We examine whether the probability of asking a question varies with gender, age, seniority, previous career, education, language proficiency, region, the democratic record and values of the state of election, and position on the bench.

We link three sources of evidence. First, we use automatic transcripts of 252 Grand Chamber hearings webcast between 2007 and 2026 to compile a speaker record that attributes 2,106 questions to named judges. Second, we assemble biographies of the 140 judges who sat in those hearings. We collected judges' curricula vitae from the CVs they submitted as candidates for election to the Court, as well as from the Court's official website. Third, we collect information on the states in respect of which the judges were elected. Each observation is a judge seated at a hearing, including judges who remain silent. Nearly all comparisons are between judges on the same bench.

The largest difference concerns the national judge of the respondent state. National judges ask a question in 45.0 percent of sittings, compared with 21.7 percent for other titular judges. With hearing fixed effects, the estimated difference is 23.1 (95% CI 15.0 to 31.2) percentage points. The same judge is more likely to ask when the case concerns the judge's state of election. Judges whose documented proficiency in the language used by the parties is very good or native are 7.0 (95% CI 2.3 to 11.8) percentage points more likely to ask than judges with lower documented proficiency. Judges also tend to ask in the

language they know better. Judges elected in respect of states with higher liberal democracy scores ask more often. The pattern varies across years of service. Judges ask less often in their first year, and those with a decade or more of service ask substantially less often than their colleagues. Among judges observed at several career stages, however, we find no decline after the first year, suggesting that the low rate among long-serving judges reflects differences between judges. We find no difference between women and men, no association with age, and no clear association with earlier career, study abroad, or region.

Empirical research on appellate oral argument has largely focused on the nine-member U.S. Supreme Court (Altmann, 2026). We extend this research to the ECHR, where the composition of the seventeen-judge Grand Chamber varies by case and English and French are the Court's official languages (European Court of Human Rights, 2025, Rules 24 and 34).

2 Literature and Theoretical Framework

2.1 Questions, interruptions, and public judicial behavior

Studies of oral argument use questions from the bench to examine what information judges seek and how they may decide a case. At the Supreme Court of the United States, the quality of argument affects votes (Johnson et al., 2006), and the number and tone of questions addressed to each side predict the outcome (Epstein et al., 2010; Black et al., 2011). The pitch of a justice's voice conveys information beyond the words spoken (Dietrich et al., 2019; Knox and Lucas, 2021). Other research examines interruptions. The rates at which justices and advocates are interrupted vary with gender, ideology, and seniority (Jacobi and Schweers, 2017; Patton and Smith, 2017). Studies report similar patterns at the High Court of Australia (Loughland, 2019).

Comparable evidence from international courts is scarce. At the ECHR, the parties plead in turn, the President invites questions from the bench, and the parties answer after a short

adjournment. We focus on whether judges ask a question during the period reserved for questions. Held and Habernal (2024) transcribed 154 hearings at the Court and released the transcripts for research on legal argument. Their corpus identifies roles on the bench without linking speech to named judges or their characteristics. We extend that work by linking speech to judicial biographies, covering a longer period, and specifying comparisons that test hypotheses about participation.

A similar study examines footage of judges' faces at the same hearings and report descriptive questioning rates by role (Caliskan and Kibris, 2026). Here we test hypotheses about those rates.

2.2 Gender, age, and seniority

Studies of group decision-making find that women speak less than men when women are outnumbered and decisions are made by majority vote (Karpowitz et al., 2012; Mendelberg et al., 2014). We ask whether the same pattern holds for judges at public hearings. Judges are selected for their professional standing, and each judge has the same formal opportunity to speak during the question round. Women once made up a small minority on the Court. Across the hearings in our sample, they occupy about a third of the seats. Research on international courts has focused mainly on how many women serve on the bench (Grossman, 2012), with less attention to how they participate once seated.

Seniority can plausibly increase or decrease the likelihood of asking a question. New judges need time to learn a court's conventions. In American appellate courts, for example, newcomers write fewer separate opinions (Hettinger et al., 2003). With experience, however, judges may have less need to ask questions. Age and seniority are difficult to distinguish in most courts. The two are less closely related at this Court because judges are elected at widely different ages and, since 2010, serve a single term of nine years.

2.3 Previous occupations and educational socialization

Judges come to the Court from national judiciaries, universities, the bar, the civil service, and diplomacy. Their prior careers are associated with how they vote (Voeten, 2007, 2008). Research on national courts also links career diversity to differences in professional habits (Epstein et al., 2003). Experience with oral questioning varies by profession. Advocates and trial judges routinely ask questions, academics often speak in public and probe arguments, and diplomats and public officials are trained to exercise discretion. Education may also shape a judge's willingness to speak. Judges who earned a degree abroad, especially in a common-law country where oral argument is central, may be more comfortable questioning parties in open court. Observers have long described the Court as a meeting place for legal cultures with different traditions of oral argument (Arold, 2007).

2.4 Language and multilingual courts

The Court works in English and French. At hearings, the parties plead in one of the two languages, with simultaneous interpretation, and judges may ask questions in either. Most judges have learned both as foreign languages and have different levels of proficiency in each. Candidates report their proficiency on a standard form and, if they fall short of the required level, undertake to attend classes. Formulating a question without notes in open court can be demanding, especially when the judge has just heard the pleading through headphones or in a second language. We therefore expect judges with stronger documented proficiency in the language of the pleadings to ask questions more often. We measure proficiency from pre-election declarations and use neither nationality nor speech at hearings to infer it.

2.5 Democratic institutions and national political culture

Judges are elected in respect of states with varied political histories, from long-established democracies to states that joined the Council of Europe after 1990, some of which have

since moved away from liberal democracy. Research on the Court links judges' votes to the politics of the governments that nominated them (Voeten, 2008) and judicial restraint to resistance from member states (Stiansen and Voeten, 2020). The Court also develops its case law with attention to what national systems will accept (Helfer and Voeten, 2014; Lupu and Voeten, 2012). We conjecture that questioning a government's lawyer in open court is one modest way to hold a government to account and that norms for doing so vary across political systems. Research on political culture links such norms to differences in self-expression values across societies (Inglehart and Welzel, 2005).

3 Research Questions and Hypotheses

We test ten hypotheses about which judges ask questions at the Court's public hearings. In each case, the outcome is whether a sitting judge asks at least one question.

H1: Gender. Women ask questions less often than men on the same bench.

H2: Age. Older judges ask questions more often than younger judges, holding years on the Court constant.

H3: ECHR seniority. Judges with more years on the Court ask questions more often.

H4: Previous profession. The probability of asking differs by the position from which a judge was recruited.

H5: Education. Judges who hold a degree from outside their state of election ask questions more often.

H6: Language. Judges with high documented proficiency in the language used most at the hearing ask questions more often.

H7: Geography. Judges elected in respect of post-socialist states ask less often than other judges.

H8: Democracy. Judges elected in respect of states with a higher level of liberal democracy at the time of election ask more often.

H9: Cultural values. Judges elected in respect of states whose populations hold stronger self-expression values ask more often.

H10: Institutional position. The national judge of the respondent state asks more often than other judges.

We derive H1 from research on group decision-making. H2 and H3 reflect the expectation that standing on the bench increases with age and experience. H4 through H6 concern judges' professional and educational backgrounds and language proficiency. H7 through H9 concern their states of election. H10 reflects the national judge's institutional position. The national judge sits by right because of familiarity with the legal system under review, which may make questions easier to prepare and more informative. We also report estimates for presiding judges, who manage hearings, for judges in senior positions, and for ad hoc judges.

We specified three interactions in advance, pairing gender with years on the Court and with language proficiency, and earlier career with years on the Court. In the descriptive analysis, we examine four features of questioning. We trace whom judges address, when and in what order they ask, what they ask, and which judges are most active.

4 Data and Measurement

4.1 Observation units

To study who speaks, we start by identifying everyone on the bench at each hearing, including judges who remained silent. For each sitting, we link the judge's biography to their role, age, and years of service at the time of the hearing. We also record each question separately: what was asked, when it was asked, whom it was addressed to, and who asked it when we can identify the speaker. Tables 1 and 2 define the outcomes and explanatory variables, respectively. Figure 9 in Section 5 shows how we link the records.

Table 1: Dependent variables

Variable	Definition	Level
Any question	At least one question unit in the hearing is attributed to the judge	Judge-hearing
Question count	Number of question units attributed to the judge	Judge-hearing
Any speech, speaking duration	Whether the judge held the floor and for how many seconds, distinguishing questions from the presiding judge's procedural speech	Judge-hearing
Time to first question	Seconds from the hearing's first question to the judge's first question, with censoring for judges who ask none	Judge-hearing
Question addressee	Applicant, respondent Government, both, third party	Question
Question language	English or French, identified from the transcript	Question
Question type	Clarification, factual, legal-interpretive, procedural, hypothetical, other	Question

Note: A question unit is a single question as segmented in the speaker record. A judge's turn can contain several units. We exclude interruptions and follow-up questions.

4.2 The Court and its Grand Chamber hearings

The Grand Chamber sits as a bench of seventeen judges. It hears cases that a Chamber relinquishes or that are referred after a Chamber judgment. It holds a public hearing in almost all such cases. Under Rule 24 of the Rules of Court, the President and Vice-Presidents of the Court, the Section Presidents, and the judge elected in respect of the respondent state sit by right. When a Chamber relinquishes a case, its members also sit. The Court fills the remaining seats and selects substitutes by drawing lots (European Court of Human Rights, 2025). The published bench composition lists judges in order of precedence.

The Court has webcast its public hearings since 2007. The archive lists 318 webcasts, of which 255 are Grand Chamber hearings and 63 are Chamber hearings. Three Grand Chamber hearings were deleted as no reliable judge data were captured. Figure 2 describes the full corpus by year. We use all available (252) Grand Chamber hearings for the main analysis and add the Chamber hearings in Section 7.6. The number of hearings has fallen since the early 2010s. Questions per hearing have increased since 2010, especially in the last three years. Ten hearings in 2020 and 2021 took place by videoconference because of the

Table 2: Explanatory variables

Variable	Measure	Official source records
Gender	Woman or man, as recorded in official documents	Assembly candidate lists and election documents
Age	Age at the hearing and age at election	ECHR judge biographies, Assembly election records, and ECHR hearing dates
Seniority	Years since the start of the term	ECHR list of judges since 1959 and Assembly election records
Previous profession	Judge, academic, advocate, public official, diplomat, politician	Assembly candidate CVs and ECHR judge biographies
Education	Degree outside the state of election, degree from a common-law country, doctorate	Assembly candidate CVs and ECHR judge biographies
Language	Speaking level in English and French, and first language	Candidate CVs published by the Assembly and CVs published by the ECHR
Geography	Post-socialist state, Southern Europe and Western Asia	UN M49 for geographic regions. See Section 4.5 for post-socialist coding
Democracy	Liberal Democracy Index and Electoral Democracy Index of the state of election	V-Dem Country-Year Dataset, version 16 (Coppedge et al., 2026)
Cultural values	Interpersonal trust and tolerance, last survey before election	World Values Survey country-wave data (Inglehart et al., 2014)
Institutional position	Presiding judge, national judge, senior position, substitute, ad hoc judge	ECHR hearing records and judgments listing the bench
Subject of the case	Convention articles at issue, in six groups	ECHR case information linked from the hearing archive

Note. The final column identifies the original records for each measure. Section 4 describes how we assembled and coded the data. Country-level variables describe the state in respect of which a judge was elected. Assembly refers to the Parliamentary Assembly of the Council of Europe. We use the United Nations M49 classification. In our sample, Southern Europe includes Albania, Andorra, Bosnia and Herzegovina, Croatia, Greece, Italy, Malta, Montenegro, North Macedonia, Portugal, San Marino, Serbia, Slovenia, and Spain. Western Asia includes Armenia, Azerbaijan, Cyprus, Georgia, and Türkiye.

Covid-19 pandemic.

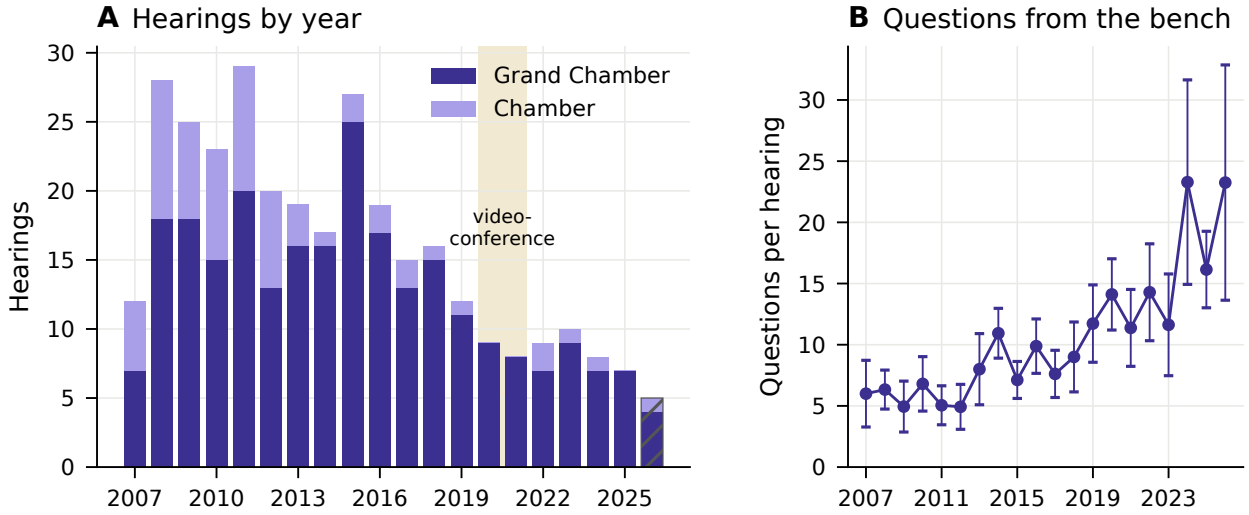

Figure 2: Hearings and questions by year. Panel A counts all recordings by year and formation. The hatched bar marks the incomplete year 2026. Panel B shows the mean number of question units per Grand Chamber hearing, with 95 percent intervals.

4.3 The judges

Across the 252 hearings, we record 4,254 sittings by titular judges, 800 by substitutes, and 29 by ad hoc judges. The titular sittings involve 140 judges elected in respect of 47 states. Table 3 summarizes the sample, and Figure 3 describes the judges.

Appendix Figure A.11 shows how coverage varies by measure. We know the gender, year of birth, start of term, and previous career of every judge in the main sample. We coded a curriculum vitae or official biography for 139 judges. Of these, 48 percent hold a degree from outside their state of election and 59 percent hold a doctorate. A language section is available for 80 judges. We code language as missing for the remaining judges. They are mainly judges elected in the 1990s or since 2024 and judges for whom only the Court's short biography was available.

Figure 4 summarizes self-reported language proficiency. Almost all judges with a language section report a good or very good command of spoken English. About four in ten rate their spoken French as fair or lower. The most common combination is very good English and

Table 3: Sample coverage and judge characteristics

Grand Chamber hearings	252
with at least one question in the record	240
with every question attributed	188
Judge-hearings, sitting judges	4,254
with gender, age and years on the Court	4,254
Judges	140
women	48
with a curriculum vitae coded	139
with a documented language section	80
States of election	47
Mean age at the hearing (years)	56.5
Mean years on the Court at the hearing	5.9
Women among sitting judges (%)	34
Elected for a post-socialist state (%)	38
Recruited from a national judiciary (%)	39
Recruited from a university (%)	30
Degree outside the state of election (%)	48
Doctorate (%)	59

Note: Grand Chamber hearings with a usable record, 2007 to 2026. We report judge characteristics as shares of judges unless stated otherwise. We compute age, years on the Court, and the shares of women and of judges elected in respect of post-socialist states across judge-hearings.

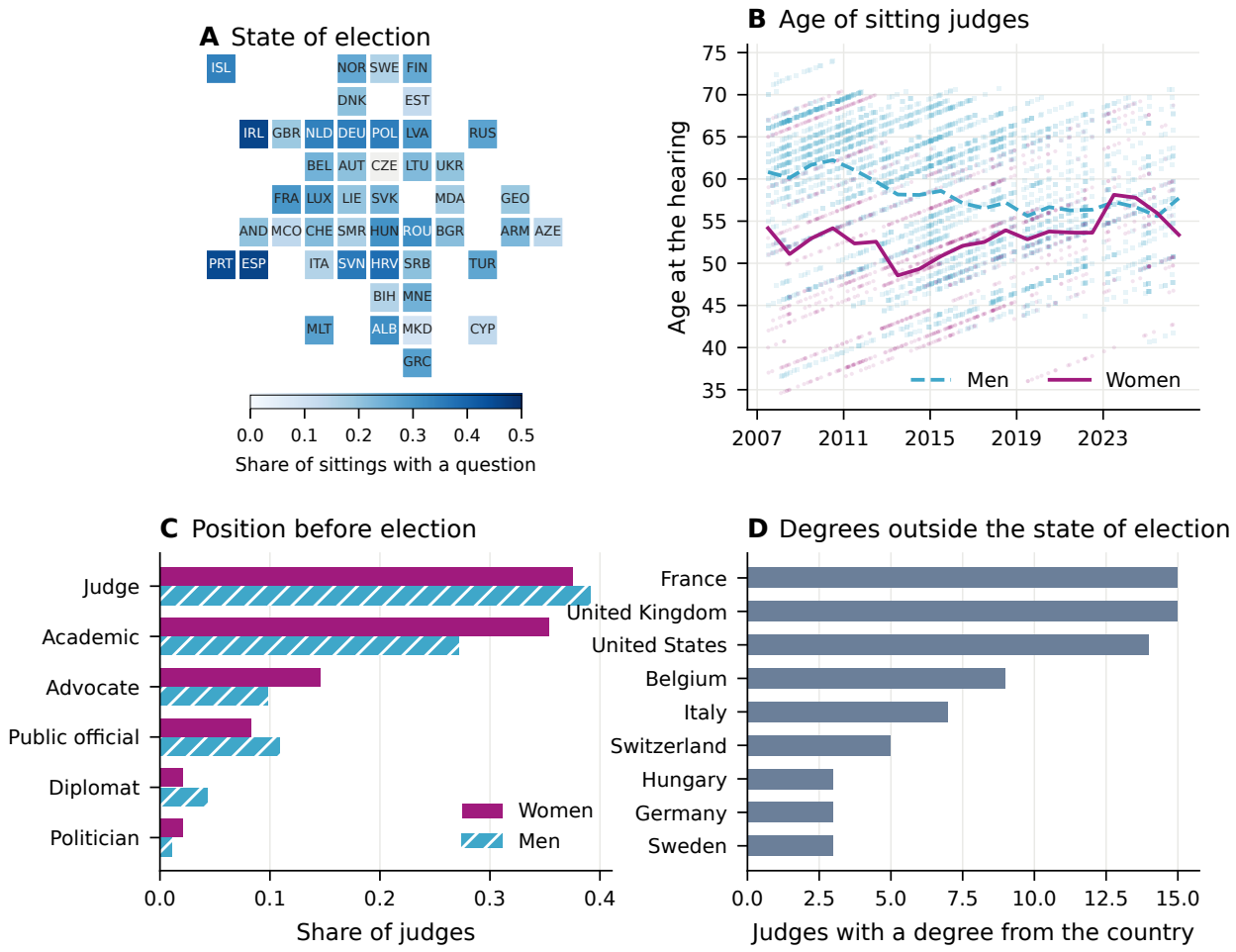

Figure 3: Characteristics of sitting judges. In Panel A, the shading represents the share of each state's judges' sittings in which they asked a question. Panel B plots each judge's age at each hearing and shows annual means for women and men. Panel C records judges' positions before recruitment. Panel D counts judges by country of degree, excluding their states of election.

fair French.

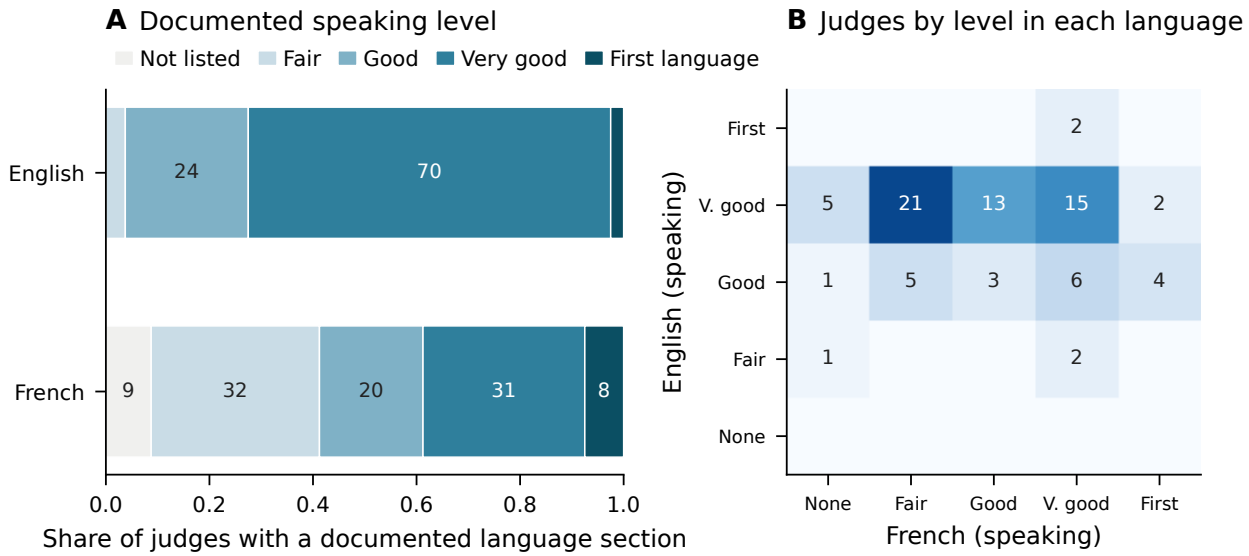

Figure 4: Self-reported speaking proficiency. The figure covers judges whose curricula vitae include a language section and shows their speaking levels in the Court's two official languages. Panel A displays percentages, and Panel B counts judges by their proficiency in each language.

4.4 Questions and speech

The speaker record identifies 2,290 question units across 252 hearings and attributes 2,106 of them to named judges on the bench. Hearings contain an average of 9.1 question units, and 240 hearings contain at least one. The median question unit lasts 45 seconds and contains 90 words. Figure 5 shows who holds the floor over the course of the hearings. Questions account for 7.3 percent of hearing time, while the applicant's side and the Government hold the floor for 39 and 39 percent, respectively. The presiding judge speaks for an average of 5.5 minutes per hearing, almost all of it on procedure. Other sitting judges average 26 seconds apiece.

Most hearings contain between four and fifteen question units (Figure 6). The most active tenth of judges accounts for 37 percent of all question units. Of the 140 judges, 16 ask no questions in the hearings we observe. Among the 105 judges with ten or more sittings, that figure is 3. Of the attributed question units, 41 percent are addressed to the Government

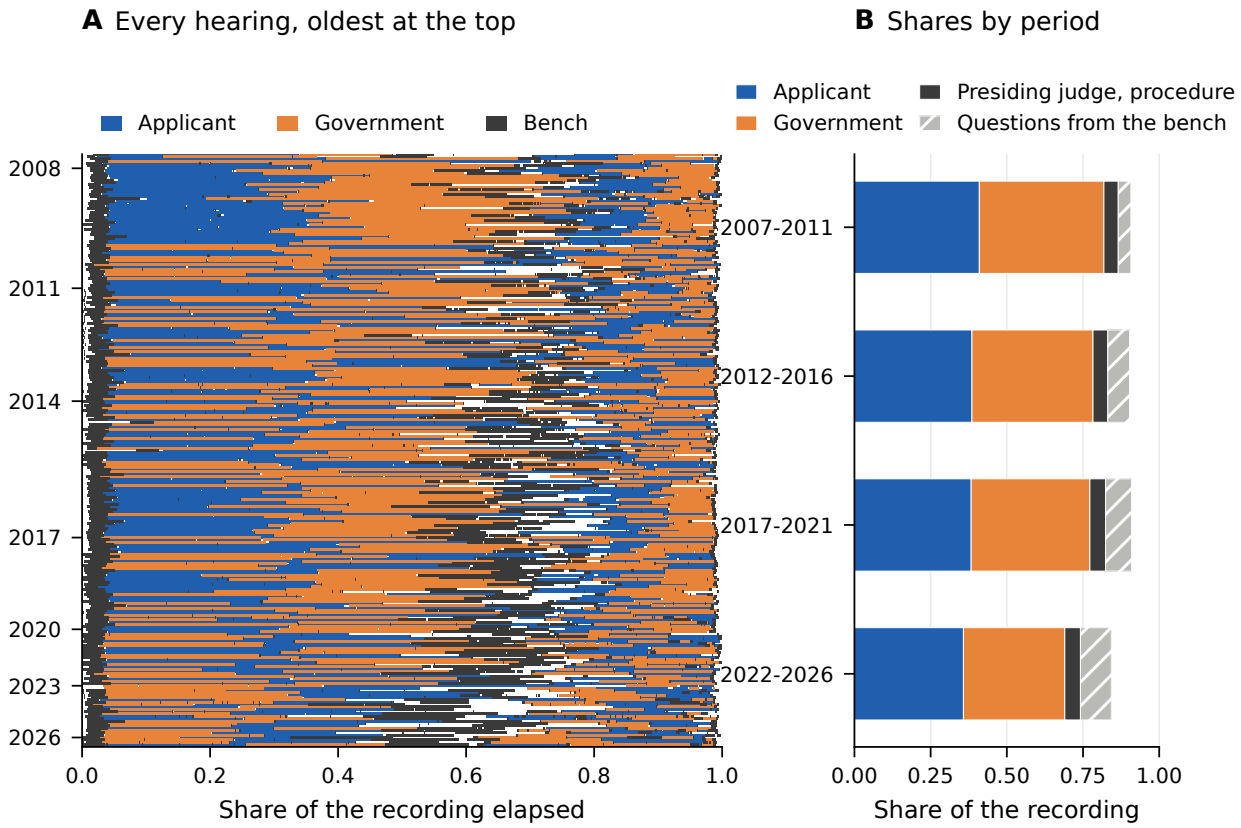

Figure 5: Floor time in Grand Chamber hearings. Each row in Panel A represents one hearing on a normalized time axis. Panel B shows the mean share of recording time by type of speech. The remainder consists of silence, recess, and unassigned speech.

alone, 27 percent to the applicant alone, and 30 percent to both parties.

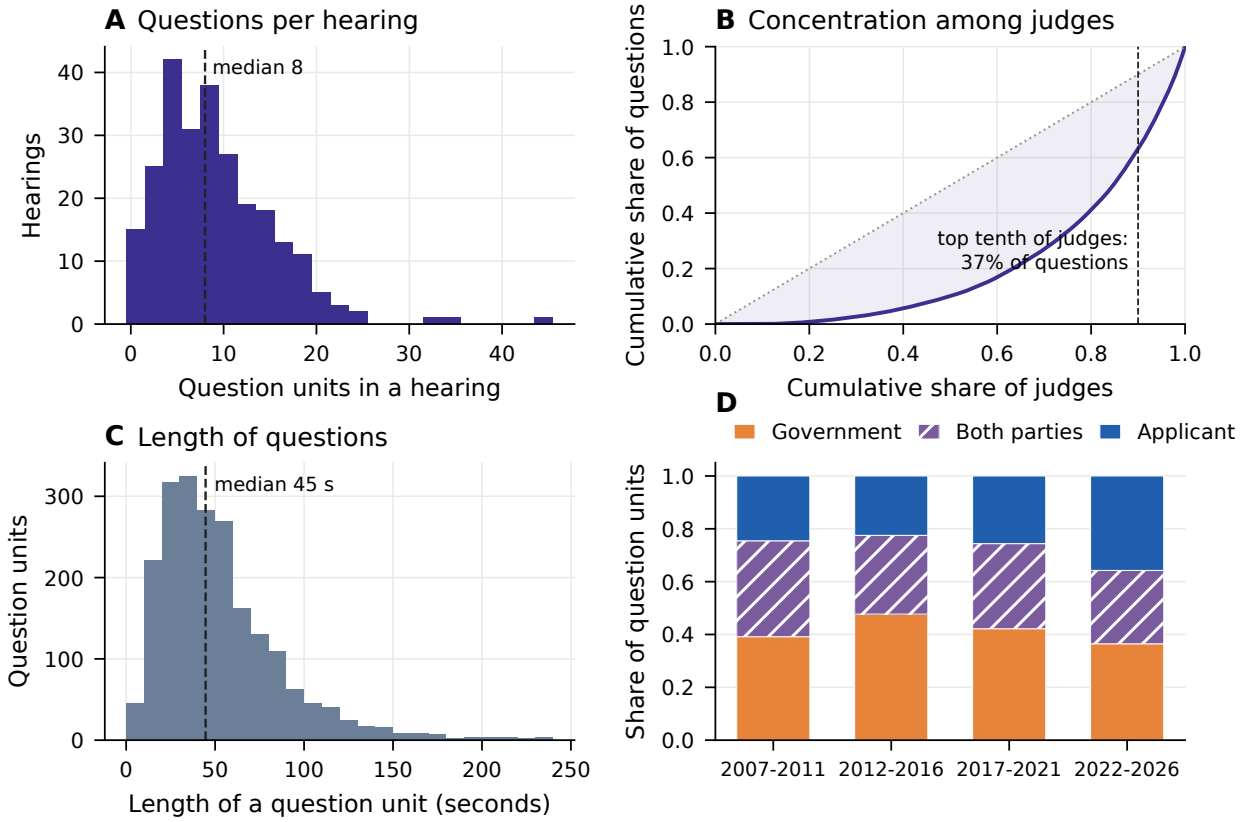

Figure 6: Distribution of questions in Grand Chamber hearings. Panel A shows question units per hearing. Panel B shows the Lorenz curve for the distribution of question units across judges. Panel C shows the duration of question units, truncated at 240 seconds. Panel D shows the addressees of attributed questions by period.

Questioning rates vary by position on the bench (Figure 7). National judges ask most often. Substitutes, who attend hearings and take part in decisions only if they replace a titular judge, almost never ask questions. Among titular judges, those in the first ranks of the order of precedence, who hold the Court's senior offices, ask less frequently than those ranked further down. Figure 8 shows the questioning rate at each rank on a schematic of the Grand Chamber bench.

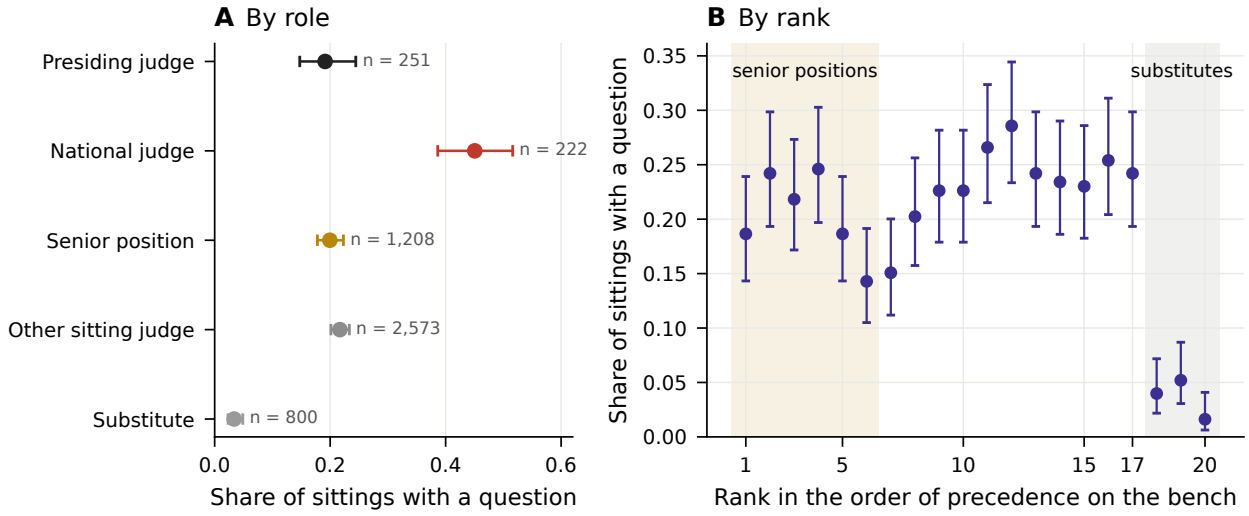

Figure 7: Questioning by position on the bench. The figure shows the share of sittings in which a judge asked at least one question, with 95 percent intervals. Panel A groups sittings by role and defines senior positions as the first six ranks in the order of precedence. Panel B reports the share for each rank.

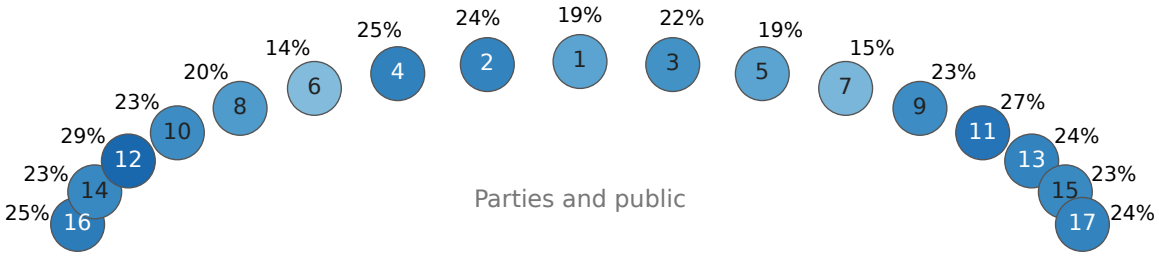

Figure 8: Seating and questioning rates. The figure shows the seats of the seventeen titular judges, numbered in order of precedence, with the presiding judge at the center. Each seat is labeled with the share of sittings in which its occupant asked a question.

4.5 Country context

For the democracy hypothesis, we use the Varieties of Democracy project's Liberal Democracy Index for the state of election in the year the judge was elected (Coppedge et al., 2026). We also use the Electoral Democracy Index, the index for the year of the hearing, and the mean index over the years when the judge was aged 18 to 25. For those formative years, we assign states that did not yet exist the values of the state to which their territory then belonged. Because the project does not cover Andorra, Liechtenstein, Monaco, or San Marino, the democracy analysis excludes those four states.

We obtained country-wave aggregates for two components of the self-expression dimension defined by Inglehart and Welzel (2005). We use the share of World Values Survey respondents who say most people can be trusted and the share who give an answer other than *never justifiable* when asked about homosexuality (Inglehart et al., 2014; Ortiz-Ospina and Roser, 2016). We take the standardized mean of these two measures from the last wave before the judge's election. The proxy is available for 34 states.

We classify regions using the United Nations geoscheme. As in the companion study, we classify as post-socialist those states that were governed by communist parties before 1990.

4.6 Temporal alignment and missing data

We measure age and years on the Court at each hearing. We also assign years on the Court to the nearest year. We align country variables with the year of election or the year of the hearing, as appropriate. For hearings in 2026, we use index values for 2025, the latest available year.

For each model, we use the judge-hearings with complete data for its variables. Each table reports the resulting numbers of judges and sittings. The baseline model includes all of the 4,254 titular sittings and all of the 140 judges. Models that include language proficiency use fewer observations because we have a language section for only 80 judges.

5 Audiovisual Processing and Measurement

5.1 From recordings to transcripts

We transcribe each recording with WhisperX (Bain et al., 2023), which combines the Whisper speech recognition model (Radford et al., 2023) with word-level alignment and speaker diarization from pyannote (Bredin, 2023). Figure 9 shows the workflow. The resulting transcript consists of time-stamped segments, each with text and an anonymous speaker label. Most recordings preserve the original languages of the hearing. A few, mostly in the later years of the sample, carry the English interpretation.

5.2 Speaker roles and questions

Diarization distinguishes voices without identifying the speakers. To draft the speaker record from the transcripts, we used the large language model ChatGPT 6.1 Sol (`gpt-6.1-sol`) at its high reasoning setting and completed the record in November 2026. For each hearing, we supplied the transcript, the published bench composition, a list of the parties' representatives, and a codebook. The model divided the hearing into phases and assigned each turn to the applicant's side, the Government, a third party, or the bench. Where the transcript allowed it, the model identified the judge who spoke, usually from the President's invitation to a judge by name. It then divided judges' turns into question units and coded their addressees.

We add three variables to the speaker record. For original-language recordings, we use a statistical language detector to identify the language of each question from its transcript. We define a hearing's main language as the language in which the parties spend most of their speaking time. We can identify that language for the 219 hearings through 2021, of which 64 were mainly in French, and for later hearings in which we detect French. We classify question type by applying a dictionary of cue phrases to the transcript and the record's summary of each question. Appendix B gives the rules. We use this coarse classification for descriptive analysis only.

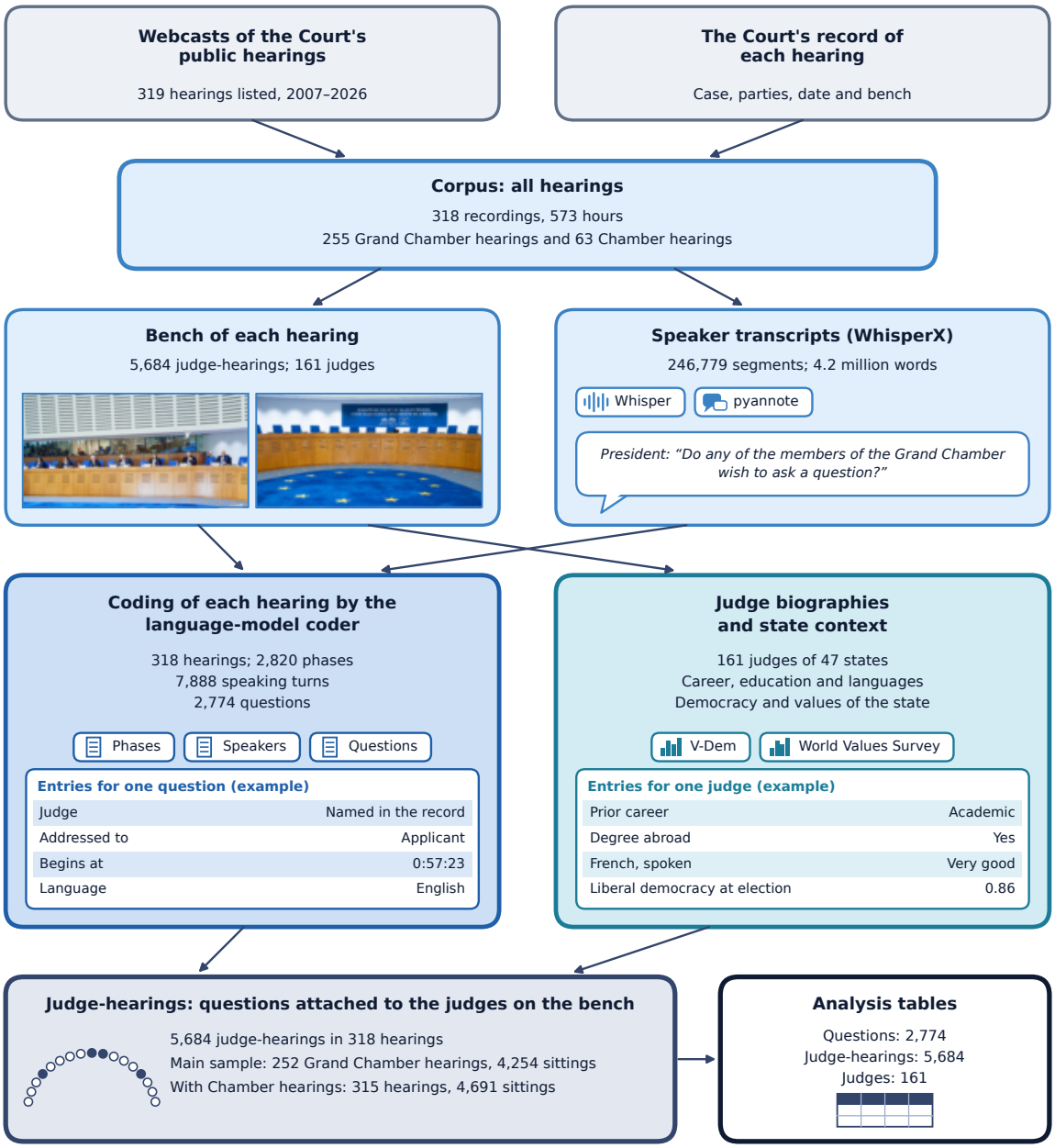

Figure 9: Methodological pipeline. Counts refer to the full corpus unless a sample is specified. The main sample comprises the Grand Chamber hearings used in the main models. The examples show entries for one question and one judge.

5.3 Quality checks

In a similar study with an accessible dataset, the authors compared the judge named in the record with the face shown on camera for 936 questions and found 99 percent agreement (Caliskan and Kibris, 2026). The authors also check the 364 turns for which the record separately logs the President calling on a judge by name. The judge named in the call matches the question attribution in 92 percent of these turns. Across all recordings, the record attributes 92 percent of question units. In 188 of the 252 Grand Chamber hearings, it attributes every recorded question unit.

6 Empirical Strategy

We estimate a linear probability model with hearing fixed effects,

$$y_{ih} = \alpha_h + \beta' x_i + \gamma' z_{ih} + \varepsilon_{ih}, \tag{1}$$

where y_{ih} indicates whether judge i asked at least one question in hearing h, α_h is the hearing fixed effect, x_i contains judge characteristics, and z_{ih} describes the judge's position on that bench. The hearing effects absorb case-level differences, including the subject, respondent, date, and overall bench composition. The coefficients therefore compare judges who sat together. We also estimate the same specification by conditional logit for the binary outcome and by Poisson pseudo-maximum likelihood for the count of question units (Santos Silva and Tenreyro, 2006; Correia et al., 2020). We cluster standard errors by judge and by hearing (Cameron et al., 2011).

The baseline covariates are indicators for the presiding judge, the national judge, and a senior position, along with gender, age at election, and years on the Court. At a given hearing, a judge's age is the sum of age at election and years on the Court. We include both terms and use the age-at-election coefficient to test H2 and the years-on-the-Court coefficient

to test H3.

For characteristics that vary across hearings for the same judge, we also estimate a model with judge fixed effects,

$$y_{ih} = \alpha_h + \mu_i + \gamma' z_{ih} + \varepsilon_{ih}, \tag{2}$$

which compares judges with themselves across hearings, for example when they sit as national judge, when they preside, or when proceedings are in their stronger language. The hearing date and the date of election determine years on the Court, so models with both hearing and judge fixed effects cannot estimate that coefficient. To estimate the career profile, we retain judge fixed effects and replace hearing fixed effects with the share of other sitting judges who asked a question at that hearing.

Most titular judges reach a given bench by lot. We cannot identify all of them because we do not observe who held an office that conferred a seat by right or who sat on a Chamber that relinquished the case. We therefore repeat comparisons of judge characteristics among titular judges outside the first six ranks in the order of precedence, excluding the presiding and national judges. The President, Vice-Presidents, and Section Presidents occupy the senior ranks. Most judges in this subsample were drawn by lot, so there is less scope for selection into cases, although some appointments in the subsample still reflect the rules for bench composition.

The country-level hypotheses draw on at most 47 states. For H8 and H9, we cluster by state of election and compute p-values using a wild cluster bootstrap with states as clusters (Cameron et al., 2008; Roodman et al., 2019). For H7, we report the same bootstrap alongside standard errors clustered by judge. We repeat all three tests on state-level mean residuals using permutation inference.

We treat the ten primary tests as one family and control the false discovery rate across them (Benjamini and Hochberg, 1995). We wrote and dated the analysis plan before estimation and reproduce it in Appendix **??**. We explain the one change to a regressor alongside the relevant estimate. We interpret the estimates as associations. Within-judge comparisons

account for time-invariant characteristics, and the non-senior subsample limits selection into cases. Neither design randomly assigns judges' gender or state of election.

7 Results

The results are provided in the sections below. Table 4 reports the unadjusted rates. Figure 10 shows the ten primary estimates.

Table 4: Questioning by gender and position on the bench

	Asked a question (% of sittings)	Question units per 100 sittings	Seconds of questions	Judge-hearings
Position				
Presiding judge	19.1	34	17	251
National judge	45.0	131	68	222
Senior position	20.0	40	22	1,208
Other sitting judge	21.7	46	24	2,573
Substitute	3.4	6	3	800
Ad hoc judge	27.6	107	51	29
Gender, sitting judges				
Women	22.0	51	24	1,442
Men	22.4	46	26	2,812
Gender, national judges				
Women	56.9	178	80	72
Men	39.3	108	62	150

Note: Grand Chamber hearings. We compute the mean seconds spent asking questions across all sittings, including those without a question. Positions are mutually exclusive and assigned in the order listed. For one hearing, the published bench composition omits the presiding judge.

7.1 Position on the bench

Table 5 reports the baseline models. On the same bench, the national judge is 23.1 (95% CI 15.0 to 31.2) percentage points more likely than colleagues to ask a question. The national judge's questioning rate is more than twice the base rate, and the estimate is unchanged after we add judge characteristics. In the count model, the national judge asks 2.9 times as many question units as a colleague. The conditional logit yields an odds ratio of 3.2. We

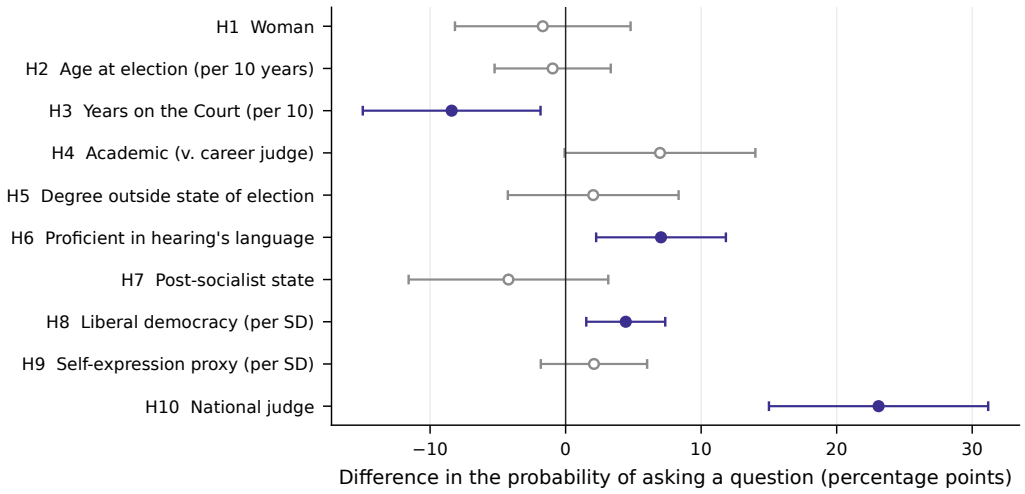

Figure 10: Estimates for the ten primary tests. The figure reports percentage-point differences in the probability of asking at least one question, with 95 percent intervals, from linear probability models with hearing fixed effects and the baseline covariates. Filled markers indicate $p < 0.05$. For H4, the figure shows the largest of the five career contrasts.

observe 77 judges both as national judge and in other positions. With judge fixed effects, the estimated difference is 19.8 (95% CI 10.2 to 29.4) percentage points. We interpret this comparison as evidence that the difference reflects the role itself. The comparison holds constant characteristics of individual judges, including those elected in respect of states that appear frequently as respondents. The results support H10.

On the same bench, we detect no difference in the probability of asking a question between the presiding judge and the other judges. Among the 17 judges we observe both in the chair and in other positions, the probability of asking is 10.4 (95% CI 1.4 to 19.3) percentage points lower when they preside ($p = 0.02$). Judges who go on to preside are relatively active questioners and ask less often while in the chair. Holding the hearing fixed, we detect no difference for judges in senior positions.

7.2 Gender, age and seniority

Women ask questions in 22.0 percent of sittings and men in 22.4 percent. With hearing fixed effects and the baseline covariates, the estimated difference is −1.7 (95% CI −8.2 to 4.8) percentage points. Among non-senior judges, it is −2.3 (95% CI −9.5 to 4.9) percentage

Table 5: Gender, age, seniority and position on the bench

	(1) Roles	(2) Baseline	(3) Non-senior	(4) Within judge	(5) Count
Presiding judge	−0.5	−0.5		−10.4	−0.11
	(5.4)	(5.7)		(4.5)	(0.26)
National judge	23.2	23.1		19.8	1.08
	(4.1)	(4.1)		(4.9)	(0.13)
Senior position	−2.1	1.8		−1.5	0.03
	(2.3)	(2.8)		(2.2)	(0.13)
Woman		−1.7	−2.3		0.02
		(3.3)	(3.6)		(0.16)
Age at election (10 years)		−1.0	−0.2		−0.08
		(2.2)	(2.3)		(0.11)
Years on the Court (10 years)		−8.4	−6.5		−0.45
		(3.3)	(3.0)		(0.17)
Hearing fixed effects	Yes	Yes	Yes	Yes	Yes
Judge fixed effects	No	No	No	Yes	No
Estimator	LPM	LPM	LPM	LPM	PPML
Judge-hearings	4,254	4,254	2,573	4,248	3,952

Note: Columns 1 to 4 report linear probability models of asking at least one question. Coefficients and standard errors (in parentheses) are in percentage points. Column 5 reports a Poisson pseudo-maximum-likelihood model for the number of question units, with coefficients in log points. Column 3 includes titular judges outside the senior ranks and excludes the presiding and national judges. We cluster standard errors by judge and by hearing.

points. The conditional logit gives an odds ratio of 0.90 ($p = 0.25$ with conventional standard errors). The minimum detectable difference is about 9.2 percentage points. Assigning every unattributed question to a man yields an estimate of −6.6 percentage points, while assigning every one to a woman yields 8.1 percentage points. We find no support for H1. The confidence interval weighs against a large gender difference and still allows a gap of several percentage points in either direction.

We find no association between age at election and questioning (−1.0 (95% CI −5.2 to 3.3) percentage points per ten years). The estimate does not support H2.

The coefficient on years of service is −8.4 (95% CI −15.0 to −1.9) percentage points per decade ($p = 0.01$), opposite to the direction predicted by H3. Panel A of Figure 11 shows the unadjusted rates. Judges ask in 20.3 percent of first-year sittings, in about a quarter of sittings from the second through the ninth year, and in 12.1 percent of sittings from the tenth year onward. Panel B compares judges with themselves over time. Relative to their own first year, judges are about ten percentage points more likely to ask in each later year, including the tenth year and beyond. Among judges we observe at several career stages, we find no decline. The low rate for the longest-serving judges in Panel A largely reflects a group of 21 judges elected in or before 1998. They account for 73 percent of sittings in the tenth year or later. We observe them only late in their terms, when they asked in 10 percent of their sittings. Unadjusted rates rise in each successive cohort, reaching 33 percent for judges elected since 2015. The number of questions per hearing also rises over the period. On the same bench, judges elected between 2010 and 2014 are 9.4 (95% CI −3.9 to 22.7) percentage points more likely to ask than judges elected in or before 1998. For judges elected since 2015, the corresponding difference is 5.7 (95% CI −10.1 to 21.5) percentage points. Both contrasts are imprecise. We interpret the negative coefficient on years of service as a difference between judges. The cohort comparisons leave open whether cohort accounts for that difference. The only within-judge career difference we can identify is the lower rate in the first year (−9.2 (95% CI −14.0 to −4.4) percentage points).

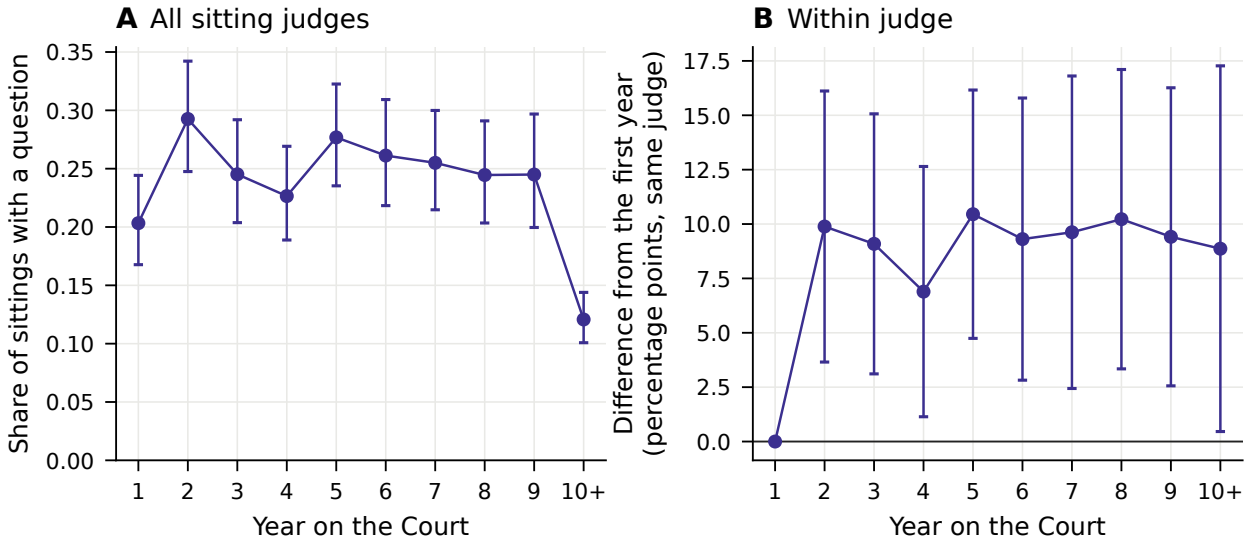

Figure 11: Questioning by year of service. Panel A shows the share of sittings with a question by year on the Court, with 95 percent Wilson intervals. Panel B shows differences from the first year, estimated with judge fixed effects and controls for position on the bench and the questioning rate of the other judges at the hearing. The 95 percent intervals use standard errors clustered by judge.

7.3 Earlier career, education and language

Table 6 reports estimates for previous career, education, and language. The five career indicators are jointly insignificant ($\chi^2_5 = 7.4$, $p = 0.19$). Judges recruited from universities are 7.0 percentage points more likely to ask than judges recruited from national judiciaries ($p = 0.05$). The remaining contrasts are small. The joint test does not support H4, although the academic contrast is consistent with the expectation from research on legal cultures.

Holding a degree from outside the state of election is associated with a difference of 2.0 (95% CI −4.3 to 8.3) percentage points ($p = 0.52$). The estimate does not support H5. In an exploratory analysis, judges with a degree from a common-law country are 8.8 (95% CI 0.4 to 17.3) percentage points more likely to ask ($p = 0.04$). This pattern is consistent with the expectation that education in an oral tradition may shape a judge's willingness to question parties.

Among the remaining characteristics, proficiency in the parties' main language has the clearest association with questioning. On the same bench, judges whose documented speak-

Table 6: Earlier career, education and language

	(1) Career	(2) Education	(3) Education	(4) Language	(5) Language
Academic	7.0				
	(3.6)				
Advocate	−2.3				
	(3.9)				
Public official	1.9				
	(5.1)				
Diplomat	−6.8				
	(7.0)				
Politician	1.7				
	(10.4)				
Degree outside state of election		2.0	−2.1		
		(3.2)	(3.4)		
Degree from a common-law country			8.8		
			(4.3)		
Doctorate			4.2		
			(2.9)		
Proficient in the hearing's language				7.0	4.1
				(2.4)	(2.2)
Baseline covariates	Yes	Yes	Yes	Yes	Roles
Hearing fixed effects	Yes	Yes	Yes	Yes	Yes
Judge fixed effects	No	No	No	No	Yes
Judges	140	139	139	76	76
Judge-hearings	4,254	4,225	4,225	2,348	2,345

Note: Linear probability models of asking at least one question. Coefficients and standard errors (in parentheses) are in percentage points. The reference category for earlier career is judges recruited from a national judiciary. Proficiency means that the documented speaking level in the parties' main language is very good or first language. Columns 4 and 5 exclude hearings from 2022 onward without detected French (see text). We cluster standard errors by judge and by hearing.

ing level in the parties' main language is very good or native are 7.0 (95% CI 2.3 to 11.8) percentage points more likely to ask than colleagues with lower documented proficiency ($p = 0.004$). Panel A of Figure 12 shows the unadjusted rates. Judges with fair or good proficiency ask in 13 percent of sittings, compared with 21 percent for judges with very good or native proficiency. The judge fixed-effects estimate compares the same judges across hearings held in their stronger and weaker languages. This comparison draws on 44 judges and yields an estimate of 4.1 (95% CI −0.3 to 8.5) percentage points ($p = 0.07$).

The analysis plan specified a proficiency measure for all hearings. Our first estimate using all hearings was 4.5 (95% CI −1.3 to 10.3) percentage points ($p = 0.12$). We then found that recordings from 2022 onward with no detected French may carry the English interpretation, leaving the original language of the hearing uncertain. We restricted the analysis to hearings whose main language we could establish. The restriction addressed a measurement problem unrelated to the result, and we made it after seeing the first estimate. We take that timing into account when interpreting H6.

Panel B of Figure 12 compares documented proficiency with the language of the questions themselves, independently of the hearing's main language.[1] Overall, judges ask 77 percent of questions in English. Judges with stronger documented French than English ask in French 98 percent of the time. The corresponding shares are 5 percent for judges with stronger English and 25 percent for judges with equal proficiency in the two languages. Judges' pre-election declarations predict the language they use on the bench years later.

7.4 Region, democracy and values

Table 7 reports the country-level models. Judges elected in respect of post-socialist states ask in 20.7 percent of sittings, compared with 23.2 percent for other judges. The adjusted difference is −4.2 (95% CI −11.6 to 3.1) percentage points ($p = 0.26$), and among non-senior judges it is −6.5 (95% CI −14.1 to 1.1) percentage points ($p = 0.09$). We detect no difference

[1] We use recordings through 2021 for Panel B. Some recordings from 2022 onward may carry the English interpretation, so a question originally asked in French can appear in the transcript as English.

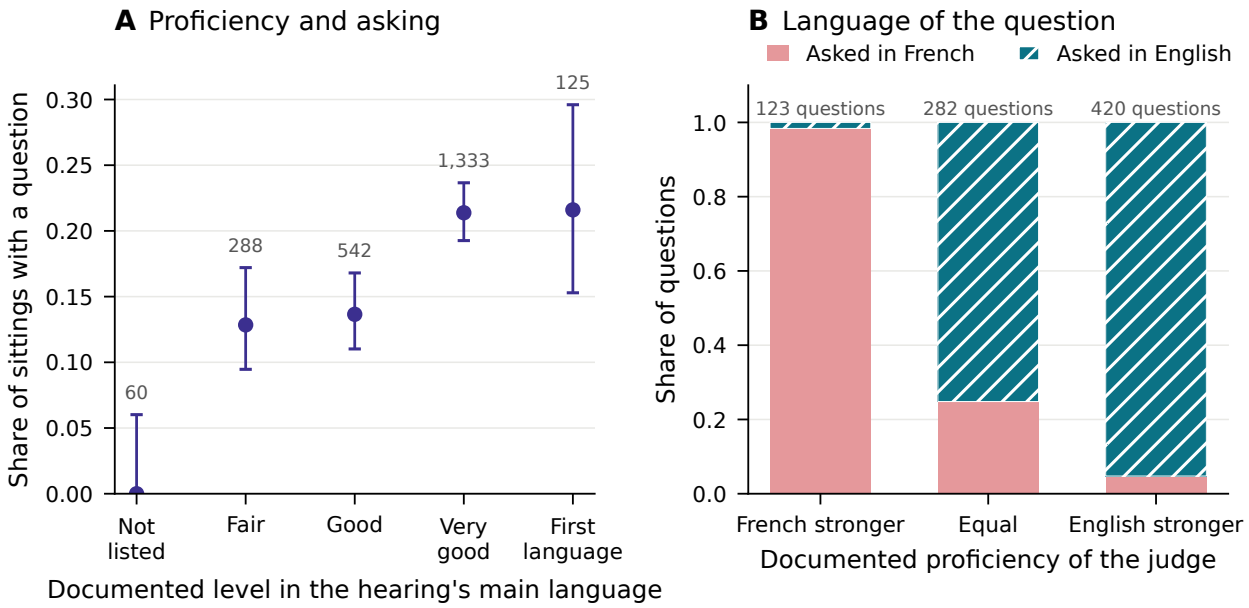

Figure 12: Language proficiency and questioning. Panel A reports the share of sittings with a question by documented speaking level in the parties' main language, with 95 percent Wilson intervals and counts of sittings. It uses hearings whose main language we can establish. Panel B shows the language of questions by the judge's relative documented proficiency.

for judges elected in respect of states in Southern Europe and Western Asia. The estimates do not support H7 at conventional significance levels.

Judges elected in respect of states one standard deviation higher on the Liberal Democracy Index at the time of election are 4.4 (95% CI 1.5 to 7.4) percentage points more likely to ask a question (wild bootstrap $p = 0.004$, 43 states). The Electoral Democracy Index and the index measured in the hearing year give similar results. At the state level, the correlation between the index and the adjusted questioning rate is 0.31 (permutation $p = 0.05$). The coefficient is 3.7 (95% CI 0.6 to 6.7) when we adjust for post-socialist status and 3.2 (95% CI 0.6 to 5.9) when we adjust for language proficiency. It ranges from 3.8 to 4.9 when we omit one state at a time. For the index averaged over a judge's formative years, the coefficient is smaller and imprecisely estimated (2.6 (95% CI −1.0 to 6.1)). The democracy measure at election supports H8, with stronger evidence at the judge level than at the state level. Panel A of Figure 13 shows considerable variation around the fitted relationship. Judges elected in respect of Spain, Portugal, and Ireland ask more often than the index predicts.

Table 7: Region, democracy and values of the state of election

	(1) Region	(2) Democracy	(3) Democracy	(4) Values	(5) Values	(6) Values
Post-socialist state	−4.2					
	(3.7)					
Southern Europe or Western Asia	0.2					
	(3.2)					
Liberal democracy at election (SD)		4.4				
		(1.4)				
Liberal democracy, formative years (SD)			2.6			
			(1.8)			
Self-expression proxy (SD)				2.1		
				(1.9)		
Interpersonal trust (SD)					−0.2	
					(1.6)	
Tolerance (SD)						3.7
						(1.7)
Baseline covariates	Yes	Yes	Yes	Yes	Yes	Yes
Hearing fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Wild bootstrap p	0.269	0.004		0.309		
States	47	43	43	34	34	34
Judge-hearings	4,254	3,836	3,836	2,941	3,023	2,941

Note: Linear probability models of asking at least one question. Coefficients and standard errors (in parentheses) are in percentage points. We standardize country measures across judges. In columns 2 to 6, we cluster standard errors by state of election and by hearing. In column 1, we cluster by judge and by hearing. We use states of election as the clusters in the wild bootstrap.

The estimate for the self-expression proxy is 2.1 (95% CI −1.8 to 6.0) percentage points (wild bootstrap $p = 0.31$). The estimates for its two components are 3.7 (95% CI 0.2 to 7.2) for tolerance and −0.2 (95% CI −3.5 to 3.1) for interpersonal trust. Only the estimate for tolerance points to a detectable association. Given the limited coverage of these measures, we draw no conclusion from the individual components. The composite estimate does not support H9.

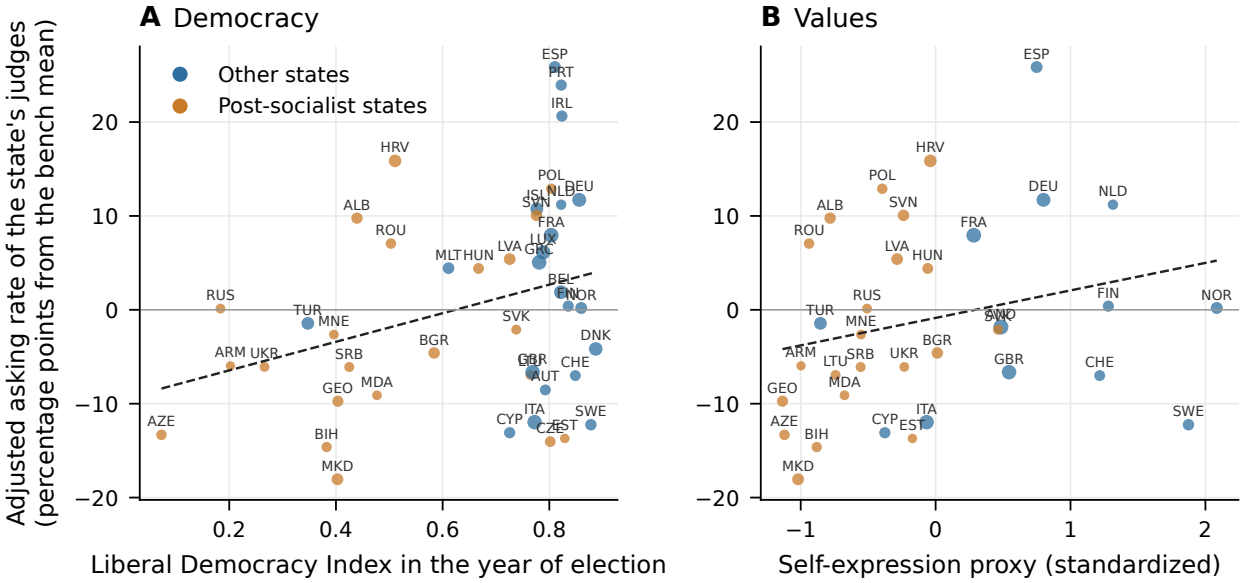

Figure 13: Questioning and characteristics of states of election. Each point represents a state. The vertical axis shows the mean residual across its judges' sittings from a model with hearing fixed effects and position on the bench. Marker size is proportional to the number of sittings. Dashed lines show weighted least-squares fits.

7.5 Interactions and robustness

Table 8 reports the interaction estimates. We find little evidence that the gender difference varies with years on the Court (1.3 (95% CI −9.9 to 12.4)) or with language proficiency (7.3 (95% CI −2.2 to 16.8)). Two results warrant further study. Judges recruited from universities ask more often than other judges early in their terms, and the difference diminishes with time (−10.7 (95% CI −20.4 to −0.9) per decade, $p = 0.03$). The association with the national-judge role is larger for women. In that role, women ask questions in 57 percent of sittings

and men in 39 percent (interaction 17.2 (95% CI 2.6 to 31.8), $p = 0.02$).

Table 8: Interactions

	(1)	(2)	(3)	(4)
Woman	−2.4	−1.2		
	(4.9)	(3.4)		
Years on the Court (10 years)	−8.7		−5.0	
	(3.8)		(3.6)	
Proficient in the hearing's language		3.6		
		(3.6)		
Academic			13.8	
			(5.0)	
National judge				17.4
				(7.2)
Woman × years on the Court	1.3			
	(5.7)			
Woman × proficient		7.3		
		(4.8)		
Academic × years on the Court			−10.7	
			(4.9)	
National judge × woman				17.2
				(7.4)
National judge × years on the Court				0.2
				(8.1)
Baseline covariates	Yes	Yes	Yes	Yes
Hearing fixed effects	Yes	Yes	Yes	Yes
Judge-hearings	4,254	2,348	4,254	4,254

Note: Linear probability models of asking at least one question. Coefficients and standard errors (in parentheses) are in percentage points. We cluster standard errors by judge and by hearing.

The baseline estimates are stable across samples (Appendix Table A.1 and Figure A.14). We restrict the sample in turn to hearings with complete attribution, to original-language recordings, and to in-person hearings. We also exclude the microstates and the presiding judge in separate specifications. The national-judge coefficient stays between 21 and 23 percentage points, and the gender coefficient stays within three points of zero. Omitting one judge at a time yields national-judge estimates between 22.0 and 25.5 percentage points and estimates for years on the Court between −10.5 and −6.8 percentage points. When

we count only medium-confidence attributions, the base rate falls and all coefficients move toward zero, as medium-confidence labels are concentrated in two periods of the sample. An omitted variable would have to explain 9 percent of the residual variance in both national-judge status and the questioning outcome to reduce the national-judge coefficient to zero (Cinelli and Hazlett, 2020).

After adjustment for the false discovery rate across the ten primary tests, three results have q-values below 0.05 in the hypothesized direction. They concern the national judge, language proficiency, and liberal democracy. The coefficient on years on the Court also meets that threshold, with a sign opposite to H3 ($q = 0.031$). Using the language estimate from all hearings, proficiency no longer meets the threshold ($q = 0.31$), while the other three results do.

7.6 Grand Chamber and Chamber hearings pooled

In Table 9, we add the 63 Chamber hearings with a usable record to the Grand Chamber sample. The pooled sample contains 315 hearings and 4,691 titular sittings by the same 140 judges. Of the 319 webcasts listed in the archive, two share a recording, two are short excerpts, and one has a bench we could not establish. A Chamber has seven judges, and its questions are distributed across fewer judges. A titular judge asks a question in 35.1 percent of Chamber sittings.

In the pooled baseline model, the national judge is 29.2 (95% CI 21.6 to 36.9) percentage points more likely to ask than colleagues. The estimated difference between women and men is −2.5 (95% CI −8.8 to 3.9) percentage points ($p = 0.44$), and the coefficient on years on the Court is −8.0 (95% CI −14.3 to −1.7) percentage points per decade. Column 3 allows each coefficient to vary between the two formations. The national-judge difference is 32.8 (95% CI 20.2 to 45.4) points larger in Chambers ($p < 0.001$), where the national judge asks a question in most hearings. The estimated difference between women and men shifts by −9.1 (95% CI −18.9 to 0.8) percentage points in Chambers ($p = 0.07$). In Chamber hearings

Table 9: Grand Chamber and Chamber hearings pooled

	(1) Grand Chamber	(2) Pooled	(3) Pooled	(4) Pooled, count
Presiding judge	−0.5	−0.4	−0.5	−0.08
	(5.7)	(4.8)	(5.7)	(0.22)
National judge	23.1	29.2	23.1	1.09
	(4.1)	(3.9)	(4.1)	(0.12)
Senior position	1.8	1.8	1.8	−0.01
	(2.8)	(2.8)	(2.8)	(0.13)
Woman	−1.7	−2.5	−1.7	−0.01
	(3.3)	(3.2)	(3.3)	(0.15)
Age at election (10 years)	−1.0	−1.0	−1.0	−0.06
	(2.2)	(2.1)	(2.2)	(0.10)
Years on the Court (10 years)	−8.4	−8.0	−8.4	−0.36
	(3.3)	(3.2)	(3.3)	(0.15)
National judge × Chamber			32.8	
			(6.4)	
Woman × Chamber			−9.1	
			(5.0)	
Years on the Court × Chamber			−2.1	
			(5.8)	
Age at election × Chamber			−1.1	
			(3.0)	
Presiding judge × Chamber			4.9	
			(9.3)	
Hearing fixed effects	Yes	Yes	Yes	Yes
Estimator	LPM	LPM	LPM	PPML
Hearings	252	315	315	
Judge-hearings	4,254	4,691	4,691	4,375

Note: Column 1 repeats the Grand Chamber baseline model. Columns 2 to 4 add Chamber hearings. Columns 1 to 3 report linear probability models of asking at least one question, with coefficients and standard errors (in parentheses) in percentage points. Column 4 reports a Poisson pseudo-maximum-likelihood model for the number of question units, with coefficients in log points. Chamber indicates a hearing before a Chamber of seven judges. Hearing fixed effects absorb its main effect. We define senior position for Grand Chamber benches only and cluster standard errors by judge and by hearing.

alone, the estimate is −10.8 (95% CI −21.6 to 0.1) percentage points ($p = 0.05$). We detect no differences between formations in the coefficients on age and years on the Court.

We repeat the ten primary tests on the pooled sample in Table 10. The estimates are close to the Grand Chamber estimates, and the same four tests have q-values below 0.05. The estimate for proficiency in the language of the hearing is 8.1 (95% CI 3.4 to 12.9) percentage points. The estimate for liberal democracy is 4.7 (95% CI 1.9 to 7.5) percentage points per standard deviation (wild bootstrap $p = 0.003$). The Chamber sample is small and comes mainly from the early years of the study period. We therefore retain the Grand Chamber as the main sample.

Table 10: The ten primary tests on all hearings pooled

		Grand Chamber	All hearings pooled		
Hypothesis	Regressor	Estimate	Estimate	p	q
H1	Woman	−1.7 (3.3)	−2.5 (3.2)	0.443	0.518
H2	Age at election, per ten years	−1.0 (2.2)	−1.0 (2.1)	0.620	0.620
H3	Years on the Court, per ten	−8.4 (3.3)	−8.0 (3.2)	0.013	0.033
H4	Five career indicators, jointly	$\chi^2_5 = 7.4$	$\chi^2_5 = 7.4$	0.194	0.310
H5	Degree outside state of election	2.0 (3.2)	2.2 (3.1)	0.467	0.518
H6	Proficient in the hearing's language	7.0 (2.4)	8.1 (2.4)	0.001	0.005
H7	Post-socialist state	−4.2 (3.7)	−4.5 (3.7)	0.217	0.310
H8	Liberal democracy at election, per SD	4.4 (1.4)	4.7 (1.4)	0.003	0.009
H9	Self-expression proxy, per SD	2.1 (1.9)	2.4 (1.8)	0.196	0.310
H10	National judge	23.1 (4.1)	29.2 (3.9)	0.000	0.000

Note: Linear probability models with hearing fixed effects and the baseline covariates. Estimates are percentage-point differences in the probability of asking at least one question, with standard errors in parentheses. The pooled sample adds 63 Chamber hearings to the 252 Grand Chamber hearings. For H8 and H9, we obtain p-values from a wild cluster bootstrap by state of election. The q-values use the Benjamini–Hochberg adjustment across the ten tests.

7.7 Convention articles

The subject of a case may affect which judges ask questions. Using hearing metadata, we group the Convention articles at issue into six categories. Cases that raise articles from several categories enter each relevant category. In 15 Grand Chamber hearings, none of the grouped articles is at issue. For 15 Grand Chamber hearings, the hearing metadata list no

article covered by our six groups.[2] Hearing fixed effects absorb the subject of the case, so we estimate whether the difference between two groups of judges varies with the articles at issue. We interact each of the six indicators with gender, election in respect of a post-socialist state, recruitment from a university, and national-judge status (Table 11 and Figure 14).

Table 11: Asking by Convention article at issue

		Asked (% of sittings)		Interaction with the article group			
Article group	Hearings	Women	Men	Woman	Post-socialist	Academic	National judge
Life and ill-treatment (Articles 2, 3)	85	21.1	23.4	−2.3 (3.0)	3.0 (3.1)	3.1 (2.8)	19.5 (7.9)
Liberty and fair trial (Articles 5, 6, 7)	110	20.7	22.4	−0.8 (2.4)	1.0 (2.5)	−4.3 (2.4)	−6.7 (6.5)
Private and family life (Article 8)	68	26.0	22.2	5.7 (3.4)	−1.3 (3.5)	−2.4 (2.9)	−2.3 (7.2)
Religion, expression, assembly (Articles 9, 10, 11)	51	25.5	28.4	−1.1 (3.3)	−5.7 (3.3)	−5.2 (4.0)	5.7 (9.9)
Discrimination (Article 14)	50	25.7	23.3	0.2 (3.6)	0.4 (4.5)	0.5 (4.1)	17.7 (7.5)
Property (Article 1 of Protocol No. 1)	11	23.3	11.8	8.6 (7.2)	8.1 (7.8)	−7.1 (6.8)	−3.9 (15.0)
Joint test, Grand Chamber (p)				0.28	0.38	0.35	0.05
Joint test, all hearings pooled (p)				0.47	0.23	0.43	0.21

Note: Grand Chamber hearings. A hearing belongs to every group whose articles are at issue. Each of the last four columns reports a separate linear probability model with hearing fixed effects and the baseline covariates. In each model, we interact one trait with the six group indicators. Entries are interaction coefficients in percentage points, with standard errors clustered by judge and by hearing in parentheses. The Wald tests assess whether the six interactions are jointly zero.

Women ask somewhat more often than men in cases about private and family life (26 versus 22 percent of sittings) and somewhat less often in cases about the right to life and ill-treatment (21 versus 23 percent). We cannot distinguish any of these differences from zero. The six interactions with gender are jointly insignificant ($p = 0.28$ in the Grand Chamber, $p = 0.47$ in the pooled sample). The joint tests likewise give little evidence of differences for judges elected in respect of post-socialist states ($p = 0.38$) or judges recruited from universities ($p = 0.35$). The estimates for national judges suggest some variation. Their advantage is 19.5 (95% CI 3.9 to 35.2) percentage points larger in cases under Articles 2 and 3 and 17.7 (95% CI 2.9 to 32.6) percentage points larger in discrimination cases. The joint test yields $p = 0.05$ in the Grand Chamber and $p = 0.21$ in the pooled sample. None of the 24 interaction terms meets the threshold after adjustment for the false discovery rate (smallest $q = 0.24$). We added these comparisons after writing the analysis plan and find no

[2]The groups cover selected Convention provisions (Appendix A). For example, the hearing in *Mugemangango v. Belgium* concerned Article 13 (the right to an effective remedy) and Article 3 of Protocol No. 1 (the right to free elections). Both provisions fall outside the six groups.

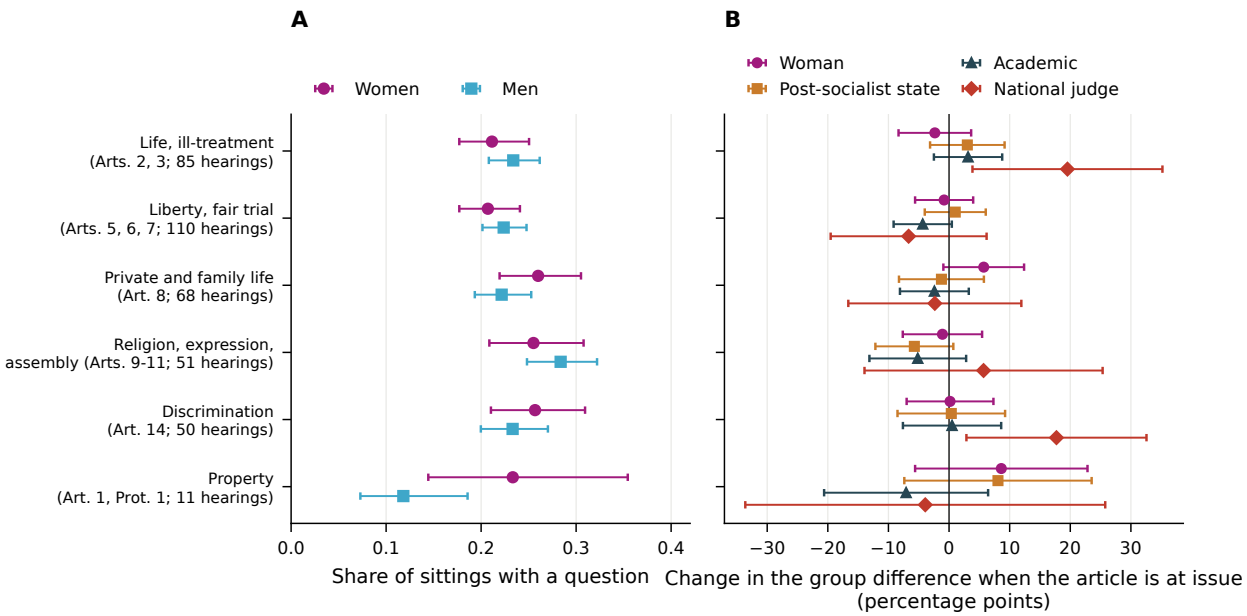

Figure 14: Questioning by Convention article at issue. Panel A shows the share of sittings in which women and men asked a question in Grand Chamber cases raising each group of articles, with 95 percent intervals. Panel B shows the interaction coefficients from Table 11, with 95 percent intervals.

clear evidence that the articles at issue change who asks questions.

7.8 Speaking time by state of election

We also examine how long judges spend asking questions, grouped by state of election (Figure 15 and Appendix Table A.2). A titular judge spends an average of 25 seconds asking questions per Grand Chamber sitting. In sittings in which a judge asks a question, the mean is 1.9 minutes. State means range from 1 second per sitting for judges elected in respect of North Macedonia to 77 seconds for those elected in respect of Portugal. The tenth and ninetieth percentiles are 8 and 53 seconds. Mean speaking time is closely correlated with the share of sittings in which judges ask a question ($r = 0.90$), so the two measures rank states similarly.

Each state is represented by two to four judges. In the median state, one judge accounts for 72 percent of the time spent asking questions. In Portugal, Paulo Pinto de Albuquerque accounts for 84 percent. To assess how much of the difference across states might arise

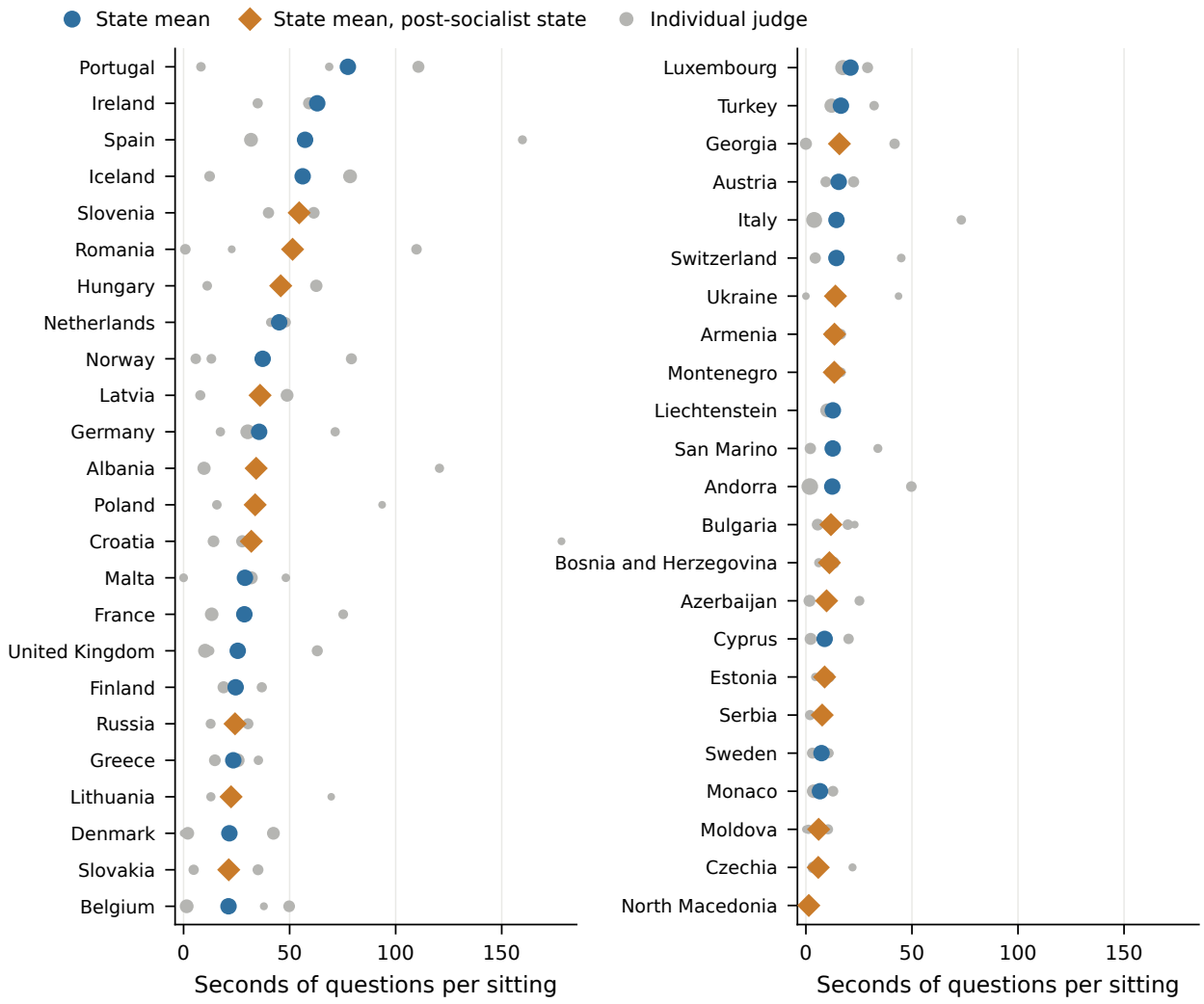

Figure 15: Speaking time by state of election. The figure covers titular judges in Grand Chamber hearings. Large markers show the mean seconds spent asking questions per sitting for each state. Small markers show judges elected in respect of that state with at least five sittings. Marker size for each judge is proportional to the number of sittings.

by chance in groups this small, we first adjust each judge's mean speaking time for hearing effects and position on the bench. We then calculate the share of variation across judges that falls between states and compare it with the distribution obtained by randomly reassigning state labels to judges. The observed share is 44 percent, compared with a permutation mean of 36 percent ($p = 0.12$). For the probability of asking a question, the observed share is 46 percent and the permutation mean is 41 percent ($p = 0.17$). The permutation tests leave open whether the rankings reflect which individual judges happened to serve for each state.

The speaking-time estimates follow the same pattern as the results in Section 7.4. Judges elected in respect of states that score one standard deviation higher on the Liberal Democracy Index spend 8.8 (95% CI 4.4 to 13.2) more seconds asking questions per sitting ($p < 0.001$). For judges elected in respect of post-socialist states, the estimated difference is −8.5 (95% CI −20.6 to 3.5) seconds ($p = 0.16$). The national judge spends 45.0 (95% CI 26.9 to 63.1) more seconds questioning than other judges on the same bench. We detect no difference between women and men (−4.4 (95% CI −15.0 to 6.2) seconds, $p = 0.41$). Judges are grouped by the state in respect of which they were elected. A judge may hold a different nationality, which we did not code separately.

7.9 Addressees, timing, and content of questions

Addressees: Of the questions addressed to one party, 61 percent go to the Government. National judges put 54 percent of their one-party questions to the Government, compared with 62 percent for other judges. The within-hearing difference is −7.2 (95% CI −17.0 to 2.5) percentage points ($p = 0.15$). We find no association between the share of questions put to the Government and the respondent state's level of democracy ($p = 0.44$, Appendix Figure A.5).

Timing: The first question comes 64 percent of the way through the median hearing. Up to 2022, the question round lasted about 8 minutes. The average number of questions per hearing rose from 7.5 in 2007–2016 to 13.2 in 2020–2022 and 17.8 in 2023–2026. Average

hearing length rose from 101 to 152 minutes, and the share of hearings with two or more separate blocks of questions rose from 6 to 62 percent (Appendix Figure A.7). The increase is gradual and extends beyond the recordings processed last. A shift toward a second question round could account for this pattern. We have yet to check that possibility against the Court's own account of its practice, and the speaker record may segment recent hearings differently. Hearing fixed effects account for hearing-level differences of either kind in the estimates above. We find little correspondence between the order of questioning and the order of precedence. Across 167 hearings in which at least three judges asked a question, the rank correlation is -0.01. The most senior of the judges who ask goes first in 23 percent of hearings. In a survival model stratified by hearing, the national judge's hazard of asking is 2.6 times that of other judges.

Question types: Under the dictionary classification, 20 percent of question units ask a party to clarify its position, 18 percent ask about facts, and 18 percent concern the interpretation of the Convention or domestic law. Hypothetical questions account for 16 percent, and questions about admissibility or procedure account for 7 percent. The remaining 21 percent fit none of these categories. Questions to applicants more often seek clarification, while questions to governments more often address legal issues or pose hypotheticals (Appendix Figure A.8).

Variation across judges: A crossed random-effects model attributes 18 percent of the variance in questioning to judges, 3 percent to hearings, and the rest to the judge-hearing level. For the 93 judges with at least twenty sittings, questioning rates computed on alternating hearings correlate at 0.78. Most variation occurs within judges across hearings, but differences between judges persist. Among judges with twenty or more sittings, the questioning rate is 4 percent at the tenth percentile and 46 percent at the ninetieth.

Questioning by individual judges. Table 12 lists the women and men with the most question units. Among judges with at least twenty Grand Chamber sittings, Figure 16 shows the women and men who asked at least one question in the largest share of their sittings.

Angelika Nußberger asked the most among women, with 69 question units in 86 sittings. Paulo Pinto de Albuquerque asked the most among men, with 77 in 49 sittings. Several of the most active judges held senior offices for part of the period, and several were academics before election. Because the record assigns low confidence to most attributions, we checked those for the judges listed in the table. Of their question turns, 172 follow a logged call by the President. The call names the same judge as the question record in 94 percent of those turns. These counts describe what judges asked in open court.

Table 12: The most active judges

Judge	State of election	Sittings	Hearings with a question	Question units	Minutes of questions	Articles most often at issue
Women						
Angelika Nußberger	Germany	86	28	69	43	3, 14, 6
Síofra O'Leary	Ireland	50	26	59	49	6, 8, 14
Iulia Antoanella Motoc	Romania	32	20	53	59	3, 6, 10
Ineta Ziemele	Latvia	59	21	50	48	3, 14, 6
Ksenija Turković	Croatia	52	24	45	24	3, 8, 6
Işıl Karakaş	Turkey	79	12	33	16	6, 3, 2
Anja Seibert-Fohr	Germany	20	12	32	24	3, 8, 2
Gabriele Kucsko-Stadlmayer	Austria	39	9	22	15	3, 8, 6
Men						
Paulo Pinto de Albuquerque	Portugal	49	32	77	90	6, 3, 14
Robert Spano	Iceland	73	34	67	96	6, 8, 13
András Sajó	Hungary	53	21	57	55	6, 3, 14
Pere Pastor Vilanova	Andorra	33	21	51	27	8, 6, 2
Marko Bošnjak	Slovenia	45	18	47	46	3, 13, 8
Vincent A. De Gaetano	Malta	62	17	44	33	3, 6, 8
Luis López Guerra	Spain	73	31	39	39	3, 6, 5
Arnfinn Bårdsen	Norway	38	17	39	50	13, 3, 8

Note: We rank judges with at least twenty Grand Chamber sittings in the sample by the number of question units attributed to them. The last column lists the Convention articles most often at issue in hearings in which each judge asked a question.

Table 13 reports the primary tests together.

8 Discussion and Conclusion

Only a minority of judges ask questions at a typical hearing. Position on the bench and command of the language of the pleadings are more closely associated with questioning

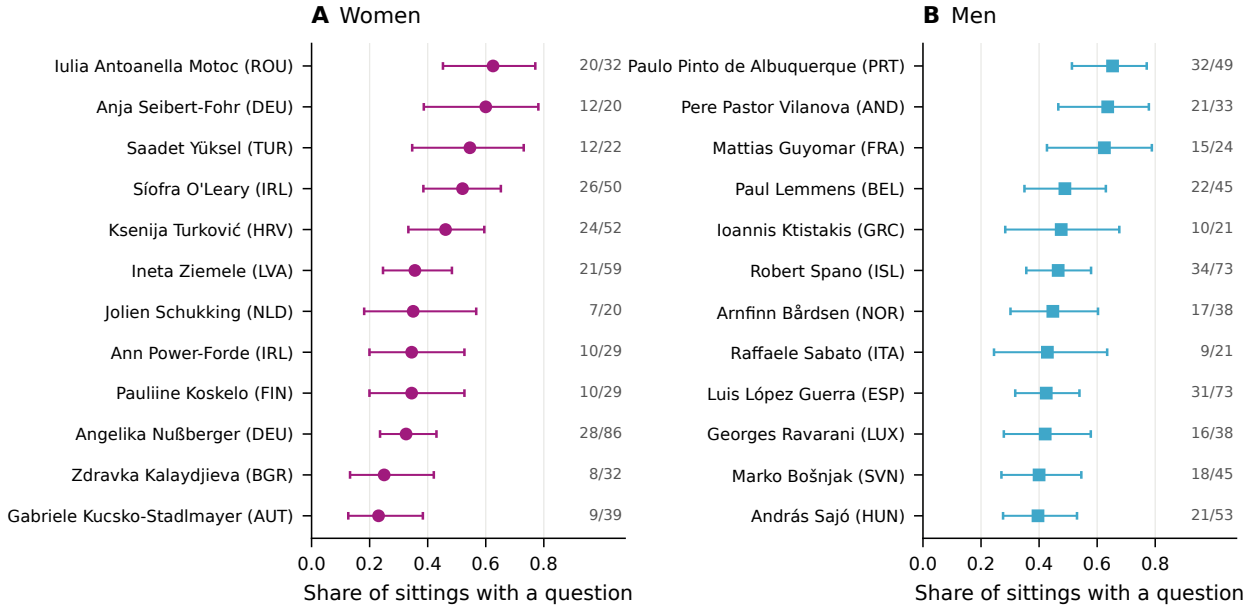

Figure 16: Judges with the highest questioning rates. For each judge shown, the figure reports the share of sittings with at least one question, a 95 percent interval, and the number of sittings with at least one question over all sittings. It includes only judges with at least twenty Grand Chamber sittings. State codes appear in parentheses.

Table 13: The ten primary tests

Hypothesis	Regressor	Estimate	p	q	Conclusion
H1	Woman	−1.7 (3.3)	0.608	0.660	No difference detected
H2	Age at election, per ten years	−1.0 (2.2)	0.660	0.660	No difference detected
H3	Years on the Court, per ten	−8.4 (3.3)	0.012	0.031	Opposite sign; a cohort difference
H4	Five career indicators, jointly	$\chi^2_5 = 7.4$	0.192	0.383	Not supported jointly
H5	Degree outside state of election	2.0 (3.2)	0.524	0.655	Not supported
H6	Proficient in the hearing's language	7.0 (2.4)	0.004	0.015	Supported
H7	Post-socialist state	−4.2 (3.7)	0.260	0.433	Not supported
H8	Liberal democracy at election, per SD	4.4 (1.4)	0.004	0.015	Supported
H9	Self-expression proxy, per SD	2.1 (1.9)	0.309	0.442	Not supported
H10	National judge	23.1 (4.1)	0.000	0.000	Supported

Note: Linear probability models with hearing fixed effects and the baseline covariates. Estimates are percentage-point differences in the probability of asking at least one question, with standard errors in parentheses. For H8 and H9, we obtain p-values from a wild cluster bootstrap by state of election. The q-values use the Benjamini–Hochberg adjustment across the ten tests.

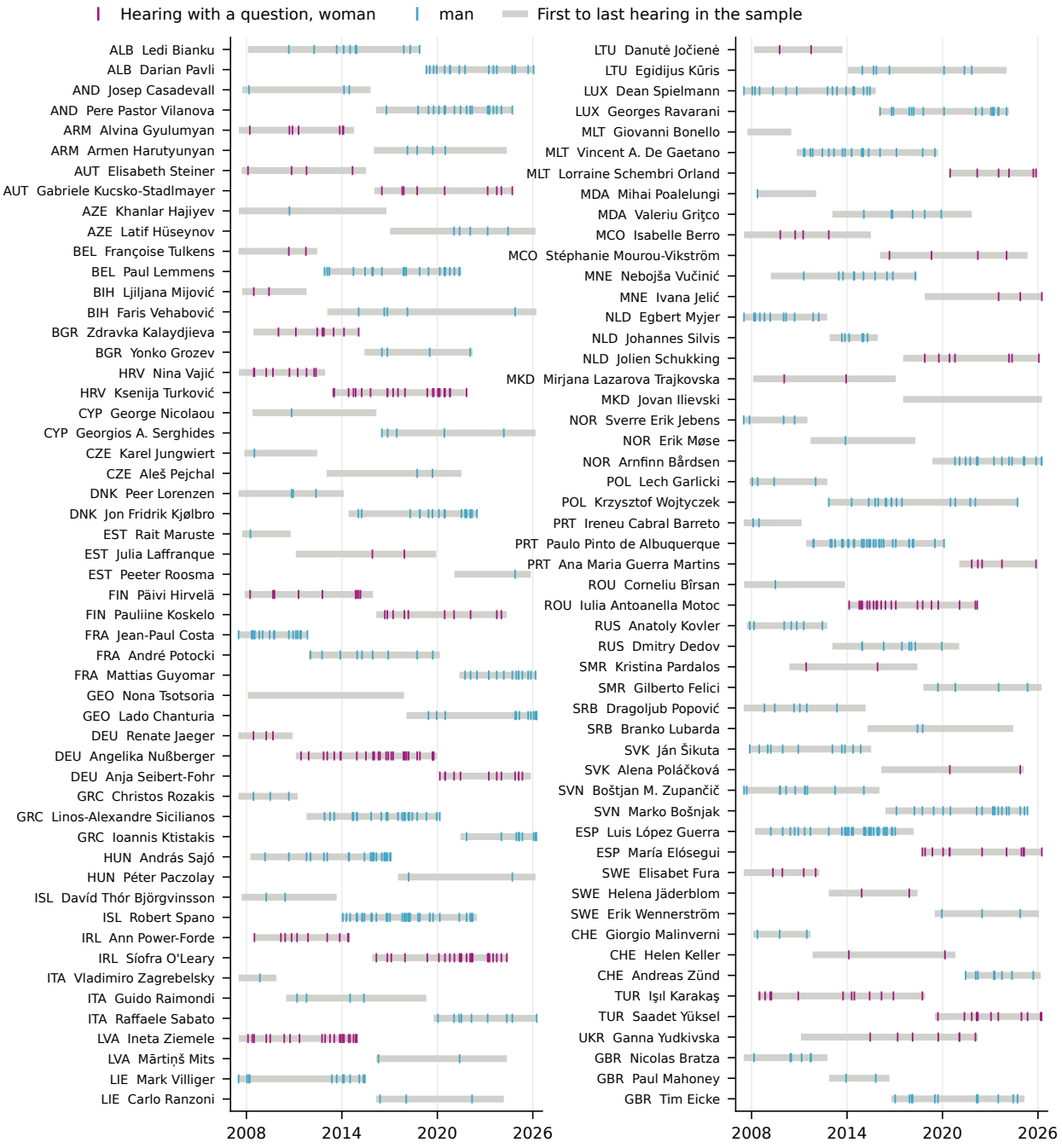

Figure 17: Questioning across terms of service. The figure groups judges with at least ten sittings by state of election. Bars extend from each judge's first to last hearing in the sample. Ticks mark hearings in which the judge asked a question.

than most of the personal characteristics we examine. The national judge's familiarity with the legal system under review may help explain why national judges ask so often. That interpretation is consistent with the rationale for a seat by right under the Convention. We cannot observe why a judge asks, and the judge rapporteur, whom we cannot identify, may often be the national judge. Judges elected in respect of respondent states thus account for an appreciable share of the Court's public questioning of governments.

The language result bears directly on how judges participate on an equal footing. Discussions of the Court's bilingual regime usually focus on access for applicants and the cost of interpretation. Our estimates suggest that the regime may also shape who takes part in the public phase of a case. We restricted the sample for this hypothesis after seeing the first estimate. Judges with fair or good proficiency in the language of the pleadings ask in 13 percent of sittings, compared with 21 percent for judges with very good or native proficiency. Interpretation lets every judge follow the proceedings, but differences in proficiency appear to affect how readily judges intervene.

We find no clear evidence of a gender gap in the Grand Chamber. The exploratory estimates for Chambers point toward the gap suggested by research on deliberating groups. In a structured question round, the President gives the floor to each judge who has asked to speak. This procedure may limit the dynamics that produce gaps in less structured discussions. A comparison of courts with different hearing procedures could test that explanation.

We interpret the democracy association cautiously. It links a characteristic of states to the behavior of the few judges elected in respect of each and draws on about forty states. Considerable variation remains unexplained (Figure 13). Differences in legal professions' conventions for public questioning, candidate selection, and unmeasured language proficiency could all contribute to the association.

Linking questions to votes and separate opinions would show whether the judges who ask questions also tend to dissent. Coding a sample by hand would help establish whether the content classification can support statistical inference. Other international courts publish

hearing recordings, allowing the same design to be used where languages, legal cultures, and speaking procedures differ.

References

Thomas Altmann. Justices on autopilot: Thinking-fast evidence from state supreme court oral arguments. *Journal of Law and Courts*, 14(1):145–170, 2026. doi: 10.1017/jlc.2025.10008.

Nina-Louisa Arold. *The Legal Culture of the European Court of Human Rights*. Martinus Nijhoff, Leiden, 2007.

Max Bain, Jaesung Huh, Tengda Han, and Andrew Zisserman. WhisperX: Time-accurate speech transcription of long-form audio. In *Proceedings of Interspeech 2023*, pages 4489–4493, 2023.

Yoav Benjamini and Yosef Hochberg. Controlling the false discovery rate: A practical and powerful approach to multiple testing. *Journal of the Royal Statistical Society: Series B*, 57(1):289–300, 1995.

Ryan C. Black, Sarah A. Treul, Timothy R. Johnson, and Jerry Goldman. Emotions, oral arguments, and Supreme Court decision making. *Journal of Politics*, 73(2):572–581, 2011.

Hervé Bredin. pyannote.audio 2.1 speaker diarization pipeline: Principle, benchmark, and recipe. In *Proceedings of Interspeech 2023*, pages 1983–1987, 2023.

Cantay Caliskan and Ezgi Siir Kibris. Do judges have emotions? What AI sees at the European Court of Human Rights. Working paper, 2026.

A. Colin Cameron, Jonah B. Gelbach, and Douglas L. Miller. Bootstrap-based improvements for inference with clustered errors. *Review of Economics and Statistics*, 90(3):414–427, 2008.

A. Colin Cameron, Jonah B. Gelbach, and Douglas L. Miller. Robust inference with multiway clustering. *Journal of Business & Economic Statistics*, 29(2):238–249, 2011.

Carlos Cinelli and Chad Hazlett. Making sense of sensitivity: Extending omitted variable bias. *Journal of the Royal Statistical Society: Series B*, 82(1):39–67, 2020.

Michael Coppedge, John Gerring, Carl Henrik Knutsen, Staffan I. Lindberg, Jan Teorell, et al. V-Dem country-year dataset v16. Varieties of Democracy (V-Dem) Project, https://www.v-dem.net, 2026.

Sergio Correia, Paulo Guimarães, and Tom Zylkin. Fast Poisson estimation with high-dimensional fixed effects. *Stata Journal*, 20(1):95–115, 2020.

Bryce J. Dietrich, Ryan D. Enos, and Maya Sen. Emotional arousal predicts voting on the U.S. Supreme Court. *Political Analysis*, 27(2):237–243, 2019.

Lee Epstein, Jack Knight, and Andrew D. Martin. The norm of prior judicial experience and its consequences for career diversity on the U.S. Supreme Court. *California Law Review*, 91(4):903–965, 2003.

Lee Epstein, William M. Landes, and Richard A. Posner. Inferring the winning party in the Supreme Court from the pattern of questioning at oral argument. *Journal of Legal Studies*, 39(2):433–467, 2010.

European Court of Human Rights. Rules of court. Strasbourg: Registry of the Court, 15 September 2025, 2025.

Nienke Grossman. Sex on the bench: Do women judges matter to the legitimacy of international courts? *Chicago Journal of International Law*, 12(2):647–684, 2012.

Lena Held and Ivan Habernal. LaCour!: Enabling research on argumentation in hearings of the European Court of Human Rights. *Artificial Intelligence and Law*, 2024.

Laurence R. Helfer and Erik Voeten. International courts as agents of legal change: Evidence from LGBT rights in Europe. *International Organization*, 68(1):77–110, 2014.

Virginia A. Hettinger, Stefanie A. Lindquist, and Wendy L. Martinek. Acclimation effects and separate opinion writing in the U.S. Courts of Appeals. *Social Science Quarterly*, 84 (4):792–810, 2003.

Ronald Inglehart and Christian Welzel. *Modernization, Cultural Change, and Democracy: The Human Development Sequence*. Cambridge University Press, New York, 2005.

Ronald Inglehart, Christian Haerpfer, Alejandro Moreno, Christian Welzel, Kseniya Kizilova, Jaime Diez-Medrano, Marta Lagos, Pippa Norris, Eduard Ponarin, and Bi Puranen. World values survey: All rounds, country-pooled datafile. Madrid: JD Systems Institute, 2014.

Tonja Jacobi and Dylan Schweers. Justice, interrupted: The effect of gender, ideology, and seniority at Supreme Court oral arguments. *Virginia Law Review*, 103(7):1379–1485, 2017.

Timothy R. Johnson, Paul J. Wahlbeck, and James F. Spriggs. The influence of oral arguments on the U.S. Supreme Court. *American Political Science Review*, 100(1):99–113, 2006.

Christopher F. Karpowitz, Tali Mendelberg, and Lee Shaker. Gender inequality in deliberative participation. *American Political Science Review*, 106(3):533–547, 2012.

Dean Knox and Christopher Lucas. A dynamic model of speech for the social sciences. *American Political Science Review*, 115(2):649–666, 2021.

Amelia Loughland. Female judges, interrupted: A study of interruption behaviour during oral argument in the High Court of Australia. *Melbourne University Law Review*, 43(2), 2019.

Yonatan Lupu and Erik Voeten. Precedent in international courts: A network analysis of case

citations by the European Court of Human Rights. *British Journal of Political Science*, 42(2):413–439, 2012.

Tali Mendelberg, Christopher F. Karpowitz, and J. Baxter Oliphant. Gender inequality in deliberation: Unpacking the black box of interaction. *Perspectives on Politics*, 12(1): 18–44, 2014.

Burt L. Monroe, Michael P. Colaresi, and Kevin M. Quinn. Fightin' words: Lexical feature selection and evaluation for identifying the content of political conflict. *Political Analysis*, 16(4):372–403, 2008.

Esteban Ortiz-Ospina and Max Roser. Trust. Our World in Data, https://ourworldindata.org/trust, 2016.

Dana Patton and Joseph L. Smith. Lawyer, interrupted: Gender bias in oral arguments at the US Supreme Court. *Journal of Law and Courts*, 5(2):337–361, 2017.

Alec Radford, Jong Wook Kim, Tao Xu, Greg Brockman, Christine McLeavey, and Ilya Sutskever. Robust speech recognition via large-scale weak supervision. In *Proceedings of the 40th International Conference on Machine Learning*, pages 28492–28518, 2023.

David Roodman, Morten Ørregaard Nielsen, James G. MacKinnon, and Matthew D. Webb. Fast and wild: Bootstrap inference in Stata using boottest. *Stata Journal*, 19(1):4–60, 2019.

J. M. C. Santos Silva and Silvana Tenreyro. The log of gravity. *Review of Economics and Statistics*, 88(4):641–658, 2006.

Øyvind Stiansen and Erik Voeten. Backlash and judicial restraint: Evidence from the European Court of Human Rights. *International Studies Quarterly*, 64(4):770–784, 2020.

Erik Voeten. The politics of international judicial appointments: Evidence from the European Court of Human Rights. *International Organization*, 61(4):669–701, 2007.

Erik Voeten. The impartiality of international judges: Evidence from the European Court of Human Rights. *American Political Science Review*, 102(4):417–433, 2008.

Online Appendix

A Variables and sources

Benches: We obtain the composition of each bench from the Court's hearing pages, which list the presiding judge, titular judges, and substitutes in order of precedence. We reconcile name variants against the Court's list of judges. In one Grand Chamber hearing, three judges listed below seventeenth in the order of precedence had been recorded as titular judges. We recoded them as substitutes. In one hearing, the published composition omits the presiding judge, leaving sixteen titular judges in our data. The national judge is the judge elected in respect of a respondent state. Ad hoc judges sit in that capacity. In *Duarte Agostinho and Others v. Portugal and 32 Others*, we code only the judge elected in respect of Portugal as the national judge. We define senior positions as the first six ranks among titular judges, where the order of precedence lists the President and Vice-Presidents of the Court and the Section Presidents. The non-senior subsample includes titular judges outside these ranks and excludes the presiding judge, the national judge, and ad hoc judges. The Court drew most of the remaining judges by lot. The exceptions are replacements for officeholders who were prevented from sitting and, in relinquished cases, members of the Chamber that relinquished jurisdiction. We cannot identify either group in our data.

Recordings outside the models: Two recordings last less than six minutes and contain no question round (*O'Halloran and Francis v. the United Kingdom* and *Ukraine v. Russia (re Crimea)*). For *Hämäläinen v. Finland*, the roster supplied with the recording belonged to another hearing, and we could not establish the bench from the sources available to us. We include these three recordings when describing the corpus and exclude them from the models. The supplied roster for *Natsvlishvili and Togonidze v. Georgia* was also incorrect. We took the bench from the Chamber judgment of 29 April 2014, which records that the first deliberation took place on the day of the hearing. We retain two hearings that contain full pleadings even though the metadata classify them as deliveries of judgments (*Svinarenko and Slyadnev v. Russia* and *Centre for Legal Resources on behalf of Valentin Câmpeanu v. Romania*).

Curricula vitae: For each judge, we consult sources in the following order. We first use the candidate's form in the Parliamentary Assembly document listing the three candidates for the seat, then the curriculum vitae published by the Court, and finally the short biography on the Court's website. In the Assembly document, we locate the form by the judge's name and the personal details that follow it. We code education from the education section. We count a university degree or a full period of enrolled study in a country other than the state of election as it existed at the time. We exclude study in another republic of the Soviet Union, Yugoslavia, or Czechoslovakia before their dissolution, as well as summer schools, visiting positions, fellowships without a degree, and honorary degrees. Judges elected in respect of Andorra, Liechtenstein, Monaco, and San Marino hold degrees from abroad almost by necessity. Table A.1 reports results excluding these states. For speaking proficiency in English and French, we code 4 for a first language, 3 for very good or fluent, 2 for good, 1

for fair, passive, or reading only, and 0 if the language section omits the language. We read each grid by locating marks on the page. Forms from the 1990s have no language section.

Country variables: We use the Liberal Democracy Index (`v2x_libdem`) and the Electoral Democracy Index (`v2x_polyarchy`) from V-Dem version 16. For formative years without separate values, we assign the values for Russia (Soviet Union) to the Baltic states, Ukraine, Moldova, and the states of the South Caucasus. We assign the values for Serbia (Yugoslavia) to the Yugoslav successor states and those for Czechia (Czechoslovakia) to Slovakia. We take country-wave aggregates for trust and tolerance from the World Values Survey as compiled by Our World in Data. When no wave precedes a judge's election, we use the earliest available wave.

Convention articles: We use the hearing metadata to identify the articles at issue. We group them as (i) Articles 2 and 3, (ii) Articles 5, 6 and 7, (iii) Article 8, (iv) Articles 9, 10 and 11, (v) Article 14 and Article 1 of Protocol No. 12, and (vi) Article 1 of Protocol No. 1. The groups exclude Article 13 and procedural articles.

B Speaker record and coding of questions

Record: For each hearing, the record contains the hearing phases, speaking turns, question units, answers, and a log of procedural events such as the President's calls. Each turn records the speaker, side, and timing. Each question unit records the author, addressee, first and last transcript segment, and a one-sentence summary. We identify authors by the judge's position in the published bench composition. Each attribution also records a confidence label and a note on the basis for the attribution. We completed the record in November 2026.

Addressee: We code the addressee as the applicant, the Government (including multiple respondent governments), both parties, or a third party. The *both* category includes questions to the parties jointly or to each in turn.

Language: For questions of at least six words, we use an n-gram detector restricted to six European languages to identify the language from the relevant transcript segments.

Question type: We apply the following rules to the summary and transcript text in English and French, in the order listed. The first match determines the type. *Hypothetical* cues are suppose, assume, hypothetical, imagine, "what would", "would it have", "were to", and conditional clauses with would or could. *Procedural* cues are exhaustion, admissibility, six-month and other time limits, victim status, standing, jurisdiction, just satisfaction, costs, interim measures, striking out, and friendly settlement. *Clarification* cues are clarify, specify, elaborate, confirm, and references to what a party said, stated, argued, or submitted. *Legal-interpretive* cues are article, Convention, case law, interpretation, principle, margin of appreciation, proportionality, legal basis, test, doctrine, compatibility, positive obligation, legitimate aim, lawfulness, consensus, and subsidiarity. *Factual* cues are how many, how

long, how often, when, where, who, what happened, statistics, figures, data, facts, practice, and evidence. We use *other* when no rule matches. The classification is deterministic.

C Additional tables

Table A.1: Baseline estimates under alternative samples and outcome definitions

Sample or outcome	National judge	Years on Court	Woman	Judge-hearings
All Grand Chamber hearings	23.1 (4.1)	−8.4 (3.3)	−1.7 (3.3)	4,254
Every question attributed	23.3 (4.4)	−10.0 (3.8)	−1.3 (3.5)	3,171
Medium-confidence attributions only	7.5 (1.9)	−2.1 (1.3)	0.4 (1.0)	4,254
Recovered attributions added	23.1 (4.1)	−8.4 (3.3)	−1.7 (3.3)	4,254
Original-language recordings	23.3 (4.1)	−8.4 (3.3)	−1.8 (3.3)	4,203
In-person hearings	23.3 (3.8)	−8.0 (3.4)	−2.5 (3.2)	4,084
Micro-states excluded	22.3 (4.1)	−6.5 (3.4)	−0.6 (3.4)	3,836
Presiding judge excluded	23.1 (4.1)	−9.3 (3.2)	−2.3 (3.3)	4,003
Hearings from 2012	21.4 (5.6)	−12.0 (4.0)	−2.0 (4.2)	2,954
Hearings before 2017	20.9 (3.5)	−3.1 (3.8)	−2.9 (3.3)	2,753
Chamber hearings	55.9 (5.3)	−10.5 (5.4)	−10.8 (5.4)	437

Note: Each row re-estimates column 2 of Table 5. Coefficients and standard errors (in parentheses) are in percentage points. We measure years on the Court in units of ten years.

Table A.3: Judges in the main sample

State	Judge	Years	Sittings	Asked	Units	CV	EN	FR
Albania	Kristaq Traja	2007–2007	2	0	0	A	–	–
Albania	Ledi Bianku	2008–2018	64	10	17	A	3	3
Albania	Darian Pavli	2019–2026	19	16	37	A	3	2
Andorra	Josep Casadevall	2007–2015	115	3	5	A	1	3
Andorra	Pere Pastor Vilanova	2016–2024	33	21	51	A	2	3
Andorra	Canòlic Mingorance Cairat	2026–2026	1	0	0	C	–	–
Armenia	Alvina Gyulumyan	2007–2014	32	7	17	A	1	0
Armenia	Armen Harutyunyan	2016–2024	22	4	7	A	3	1
Armenia	Vahe Grigoryan	2025–2026	3	0	0	C	–	–
Austria	Elisabeth Steiner	2007–2015	35	4	10	A	3	3
Austria	Gabriele Kucsko-Stadlmayer	2016–2024	39	9	22	A	2	2
Austria	András Jakab	2025–2026	4	0	0	C	–	–
Azerbaijan	Khanlar Hajiyev	2007–2016	48	1	2	A	2	0
Azerbaijan	Latif Hüseynov	2017–2026	25	5	11	A	3	2
Belgium	Françoise Tulkens	2007–2012	72	2	3	A	2	4
Belgium	Paul Lemmens	2012–2021	45	22	38	A	3	3
Belgium	Frédéric Krenc	2022–2026	8	2	4	C	–	–
Bosnia and Herzegovina	Ljiljana Mijović	2007–2011	19	2	4	A	3	0
Bosnia and Herzegovina	Faris Vehabović	2013–2026	51	5	22	A	3	1
Bulgaria	Snejana Botoucharova	2007–2008	3	0	0	A	–	–
Bulgaria	Zdravka Kalaydjieva	2008–2015	32	8	15	A	3	1
Bulgaria	Yonko Grozev	2015–2022	46	4	6	A	3	1

State	Judge	Years	Sittings	Asked	Units	CV	EN	FR
Bulgaria	Diana Kovatcheva	2025–2026	6	3	5	C	–	–
Croatia	Nina Vajić	2007–2012	45	10	19	A	3	3
Croatia	Ksenija Turković	2013–2021	52	24	45	C	–	–
Croatia	Davor Derenčinović	2023–2026	7	6	19	C	–	–
Cyprus	Loukis Loucaides	2007–2007	3	0	0	A	3	3
Cyprus	George Nicolaou	2008–2016	49	1	1	C	–	–
Cyprus	Georgios A. Serghides	2016–2026	31	5	13	C	–	–
Czechia	Karel Jungwiert	2007–2012	22	1	1	A	2	3
Czechia	Aleš Pejchal	2013–2021	45	2	2	C	–	–
Czechia	Kateřina Šimáčková	2023–2026	9	4	6	C	–	–
Denmark	Peer Lorenzen	2007–2014	57	3	3	A	–	–
Denmark	Jon Fridrik Kjølbro	2014–2022	59	17	34	A	3	1
Denmark	Anne Louise Bormann	2024–2026	5	0	0	A	3	1
Estonia	Rait Maruste	2007–2010	11	1	1	A	2	1
Estonia	Julia Laffranque	2011–2019	37	2	4	C	–	–
Estonia	Peeter Roosma	2021–2025	12	1	2	C	–	–
Finland	Päivi Hirvelä	2007–2015	50	9	21	A	2	1
Finland	Pauliine Koskelo	2016–2024	29	10	15	A	3	2
Finland	Juha Lavapuro	2025–2026	3	0	0	C	–	–
France	Jean-Paul Costa	2007–2011	69	17	25	C	–	–
France	André Potocki	2011–2020	50	9	19	A	2	4
France	Mattias Guyomar	2021–2026	24	15	28	A	2	4
Georgia	Mindia Ugrekhelidze	2007–2007	1	0	0	A	3	1
Georgia	Nona Tsotsoria	2008–2017	50	0	0	A	3	0
Georgia	Lado Chanturia	2018–2026	31	12	27	C	–	–
Germany	Georg Ress	2007–2007	1	1	2	A	–	–
Germany	Renate Jaeger	2007–2010	20	3	8	A	2	1
Germany	Angelika Nußberger	2011–2019	86	28	69	A	3	3
Germany	Anja Seibert-Fohr	2020–2025	20	12	32	C	–	–
Greece	Christos Rozakis	2007–2011	46	3	6	A	–	–
Greece	Linos-Alexandre Sicilianos	2011–2020	72	23	38	A	3	3
Greece	Ioannis Ktistakis	2021–2026	21	10	21	A	3	3
Hungary	András Baka	2007–2007	2	0	0	A	3	1
Hungary	András Sajó	2008–2017	53	21	57	C	–	–
Hungary	Péter Paczolay	2017–2026	23	2	5	A	3	1
Iceland	Davíd Thór Björgvinsson	2007–2013	34	2	7	A	3	0
Iceland	Robert Spano	2013–2022	73	34	67	C	–	–
Iceland	Oddný Mjöll Arnardóttir	2024–2026	3	1	1	A	3	1
Ireland	Ann Power-Forde	2008–2014	29	10	18	–	–	–
Ireland	Síofra O'Leary	2015–2024	50	26	59	A	4	3
Ireland	Úna Ní Raifeartaigh	2024–2026	4	4	25	C	–	–
Italy	Vladimiro Zagrebelsky	2007–2009	14	1	1	A	2	2
Italy	Guido Raimondi	2010–2019	103	4	5	A	3	3
Italy	Raffaele Sabato	2019–2026	21	9	14	A	3	2
Latvia	Ineta Ziemele	2007–2014	59	21	50	A	3	2
Latvia	Mārtiņš Mits	2016–2024	28	2	4	A	3	1
Latvia	Artūrs Kučs	2025–2026	4	2	5	C	–	–
Liechtenstein	Mark Villiger	2007–2015	73	12	18	C	–	–
Liechtenstein	Carlo Ranzoni	2016–2024	27	3	8	C	–	–
Liechtenstein	Alain Chablais	2025–2026	3	1	4	C	–	–
Lithuania	Danutė Jočienė	2008–2013	19	2	6	A	3	2
Lithuania	Egidijus Kūris	2014–2024	41	7	15	A	3	1

State	Judge	Years	Sittings	Asked	Units	CV	EN	FR
Lithuania	Gediminas Sagatys	2024–2026	5	3	11	C	–	–
Luxembourg	Dean Spielmann	2007–2015	92	17	30	C	–	–
Luxembourg	Georges Ravarani	2016–2024	38	16	25	C	–	–
Luxembourg	Stéphane Pisani	2024–2025	3	2	3	C	–	–
Malta	Giovanni Bonello	2007–2010	15	0	0	A	3	1
Malta	Vincent A. De Gaetano	2010–2019	62	17	44	A	3	1
Malta	Lorraine Schembri Orland	2020–2025	13	6	13	A	2	1
Moldova	Stanislav Pavlovschi	2007–2008	6	0	0	A	3	0
Moldova	Mihai Poalelungi	2008–2012	20	1	1	A	1	3
Moldova	Valeriu Griţco	2013–2021	28	6	7	C	–	–
Moldova	Diana Sârcu	2023–2026	8	1	1	C	–	–
Monaco	Isabelle Berro	2007–2015	70	4	10	A	2	4
Monaco	Stéphanie Mourou-Vikström	2016–2025	34	4	8	A	3	4
Montenegro	Nebojša Vučinić	2009–2018	40	10	14	A	3	1
Montenegro	Ivana Jelić	2018–2026	22	3	8	C	–	–
Netherlands	Egbert Myjer	2007–2012	30	11	27	A	3	1
Netherlands	Johannes Silvis	2012–2015	21	6	10	C	–	–
Netherlands	Jolien Schukking	2017–2026	20	7	13	C	–	–
North Macedonia	Margarita Tsatsa-Nikolovska	2007–2007	1	0	0	A	3	3
North Macedonia	Mirjana Lazarova Trajkovska	2008–2017	68	2	4	C	–	–
North Macedonia	Jovan Ilievski	2017–2026	23	0	0	A	3	1
Norway	Sverre Erik Jebens	2007–2011	24	4	4	A	3	1
Norway	Erik Møse	2011–2018	32	1	3	C	–	–
Norway	Arnfinn Bårdsen	2019–2026	38	17	39	A	3	1
Poland	Lech Garlicki	2007–2012	22	4	6	A	3	2
Poland	Krzysztof Wojtyczek	2012–2024	44	16	36	A	3	3
Poland	Anna Adamska-Gallant	2025–2026	6	5	14	C	–	–
Portugal	Ireneu Cabral Barreto	2007–2011	22	2	6	A	2	3
Portugal	Paulo Pinto de Albuquerque	2011–2020	49	32	77	C	–	–
Portugal	Ana Maria Guerra Martins	2021–2025	12	5	14	A	3	3
Romania	Corneliu Bîrsan	2007–2013	33	1	1	A	2	3
Romania	Iulia Antoanella Motoc	2014–2022	32	20	53	C	–	–
Romania	Sebastian Răduleţu	2024–2026	7	1	3	A	3	3
Russia	Anatoly Kovler	2007–2012	26	7	10	A	3	0
Russia	Dmitry Dedov	2013–2021	37	8	19	C	–	–
Russia	Mikhail Lobov	2022–2022	1	1	3	A	3	1
San Marino	Antonella Mularoni	2007–2008	4	1	2	A	3	2
San Marino	Kristina Pardalos	2010–2018	41	2	3	C	–	–
San Marino	Gilberto Felici	2018–2026	17	4	12	C	–	–
Serbia	Dragoljub Popović	2007–2015	33	6	11	C	–	–
Serbia	Branko Lubarda	2015–2024	29	2	2	A	3	3
Serbia	Mateja Đurović	2025–2026	4	3	7	C	–	–
Slovakia	Ján Šikuta	2007–2015	36	11	23	C	–	–
Slovakia	Alena Poláčková	2016–2025	30	2	3	C	–	–
Slovenia	Boštjan M. Zupančič	2007–2016	40	11	25	C	–	–
Slovenia	Marko Bošnjak	2016–2025	45	18	47	C	–	–
Slovenia	Vasilka Sancin	2026–2026	2	2	7	C	–	–
Spain	Javier Borrego Borrego	2007–2007	3	1	2	A	2	3
Spain	Luis López Guerra	2008–2018	73	31	39	A	–	–
Spain	María Elósegui	2018–2026	17	13	50	A	3	3
Sweden	Elisabet Fura	2007–2012	24	4	6	A	2	2
Sweden	Helena Jäderblom	2012–2018	38	2	3	A	3	2

State	Judge	Years	Sittings	Asked	Units	CV	EN	FR
Sweden	Erik Wennerström	2019–2026	24	3	7	A	3	2
Switzerland	Giorgio Malinverni	2008–2011	24	3	9	A	3	4
Switzerland	Helen Keller	2011–2020	40	2	3	A	3	2
Switzerland	Andreas Zünd	2021–2026	14	9	15	C	–	–
Turkey	Rıza Türmen	2007–2008	6	2	2	A	–	–
Turkey	Işıl Karakaş	2008–2018	79	12	33	A	2	3
Turkey	Saadet Yüksel	2019–2026	22	12	15	A	3	1
Ukraine	Volodymyr Butkevych	2007–2008	5	0	0	A	2	1
Ukraine	Ganna Yudkivska	2011–2022	53	7	15	A	3	2
Ukraine	Mykola Gnatovskyy	2023–2024	5	3	5	A	3	2
United Kingdom	Nicolas Bratza	2007–2012	75	6	16	C	–	–
United Kingdom	Paul Mahoney	2012–2016	24	2	6	A	4	3
United Kingdom	Tim Eicke	2016–2025	38	11	38	C	–	–
United Kingdom	Hugh Mercer	2026–2026	1	1	2	C	–	–

Note: Years gives the first and last year in which a judge sat in a hearing in the main sample. Asked counts sittings with a question, and Units counts question units. In the CV column, A denotes a candidate's form in an Assembly document, and C denotes a curriculum vitae or biography published by the Court. EN and FR show documented speaking levels, coded 4 for a first language, 3 for very good, 2 for good, 1 for fair, and 0 when the language is not listed. A dash indicates that the language section is unavailable.

Table A.4: Grand Chamber hearings in the main sample

Date	Case	Units	Askers
2007-07-04	Korbely v. Hungary	6	3
2007-07-11	Saadi v. Italy	9	4
2007-09-12	Burden and Burden v. United Kingdom	4	1
2007-09-26	N. v. United Kingdom	2	0
2007-11-14	Kovacic and others v. Slovenia	11	4
2007-11-21	Yumak and Sadak v. Turkey	4	3
2008-01-16	Demir and Beykara v. Turkey	7	5
2008-02-06	Maslov v. Austria	7	5
2008-02-27	S. and Michael Marper v. United Kingdom	9	5
2008-03-19	Salduz v. Turkey	6	3
2008-03-26	Sergei Zolotoukhine v. Russia	5	2
2008-04-02	Silih v. Slovenia	2	1
2008-04-30	Leger v. France	2	1
2008-05-14	Paladi v. Moldova	10	4
2008-05-21	A. and others v. United Kingdom	4	2
2008-06-11	Gorou v. Greece	8	2
2008-06-18	Bykov v. Russia	7	3
2008-06-25	Andrejeva v. Latvia	14	3
2008-07-02	Kozacioglu v. Turkey	11	6
2008-07-09	Verein Gegen Tierfabriken Schweiz (VGT) v. Switzerland	3	2
2008-09-24	Mooren v. Germany	0	0
2008-10-22	Micallef v. Malta	6	3
2008-11-05	Enea v. Italy	6	2
2008-11-19	Varnava v. Turkey	7	1
2009-01-07	Scoppola v. Italy	3	2

Date	Case	Units	Askers
2009-02-11	Depalle v. France and Brosset Triboulet and others v. France	2	0
2009-03-04	Kart v. Turkey	7	3
2009-03-18	Gafgen v. Germany	2	2
2009-04-01	Orsus and others v. Croatia	16	5
2009-05-06	Medvedyev and others v. France	2	2
2009-05-20	Kononov v. Latvia	0	0
2009-06-03	Sejdic and Finci v. Bosnia and Herzegovina	4	2
2009-06-17	Guiso-Gallisay v. Italy	6	2
2009-07-01	Cudak v. Lithuania	7	3
2009-09-02	Carson and others v. United Kingdom	6	3
2009-09-16	Tanase v. Moldova	0	0
2009-09-23	Mangouras v. Spain	1	1
2009-10-07	Neulinger and Shuruk v. Switzerland	14	5
2009-10-21	Taxquet v. Belgium	8	3
2009-11-18	Demopoulos v. Turkey and 7 other cases	0	0
2009-12-09	A, B and C v. Ireland	5	2
2009-12-16	Serife Yigit v. Turkey	6	2
2010-01-06	Sanoma Uitgevers B.V. v. the Netherlands	8	3
2010-01-20	Sakhnovskiy v. Russia	4	2
2010-03-03	McFarlane v. Ireland	5	4
2010-04-28	Paksas v. Lithuania	0	0
2010-05-19	Al-Khawaja and Tahery v. United Kingdom	4	2
2010-06-09	Al-Skeini and Others v. the United Kingdom	9	4
2010-06-30	Lautsi v. Italy	4	2
2010-09-01	M.S.S. v. Belgium and Greece	9	6
2010-09-15	Sargsyan v. Azerbaijan	4	3
2010-09-15	Chiragov and Others v. Armenia	12	3
2010-09-29	Giuliani and Gaggio v. Italy	4	3
2010-10-13	Springer v. Germany	7	0
2010-11-03	Stummer v. Austria	18	7
2010-11-24	Bayatyan v. Armenia	4	1
2010-12-08	Palomo Sanchez and Others v. Spain	10	5
2011-01-12	Kotov v. Russia	5	2
2011-02-09	Stanev v. Bulgaria	4	2
2011-02-23	S.H. and others v. Austria	2	1
2011-03-09	Nejdet Sahin and Perihan Sahin v. Turkey	3	2
2011-03-23	Nada v. Switzerland	2	2
2011-03-30	Creanga v. Romania	2	1
2011-04-13	Aksu v. Turkey	14	6
2011-05-04	Sitaropoulos and Others v. Greece	6	4
2011-05-18	Van der Heijden v. the Netherlands	3	2
2011-06-08	Konstantin Markin v. Russia	10	3
2011-06-22	Hirsi and Others v. Italy	4	2
2011-07-06	Kuric and Others v. Slovenia	10	1
2011-08-31	Boulois v. Luxembourg	0	0
2011-09-14	Austin and Others v. the United Kingdom	6	3
2011-09-28	Gillberg v. Sweden	5	3
2011-10-12	Centro Europa 7 S.R.L. v. Italy and Di Stefano v. Italy	10	4
2011-10-19	Idalov v. Russia	0	0
2011-11-02	Scoppola v. Italy	4	2
2011-11-16	Mouvement Raelien Suisse v. Switzerland	4	3

Date	Case	Units	Askers
2011-11-30	Herrmann v. Germany	7	2
2012-01-11	Vistins and Perepjolkins v. Latvia	9	5
2012-01-25	Catan and Others v. Republic of Moldova and Russia	0	0
2012-03-07	Animal Defenders International c. United Kingdom	0	0
2012-03-21	De Souza Ribeiro v. France	8	1
2012-04-04	Fabris v. France	2	2
2012-05-16	El-Masri v. "the former Yugoslav Republic of Macedonia"	4	3
2012-06-13	Georgia v. Russia (I)	5	3
2012-10-03	X. and Others v. Austria	4	2
2012-10-10	X. v. Latvia	5	3
2012-11-07	Sindicatul 'Pastorul cel Bun' v. Romania	12	5
2012-11-14	Allen v. United Kingdom	4	2
2012-11-28	Vinter and Others v. United Kingdom	5	3
2012-12-12	Maktouf and Damjanovic v. Bosnia and Herzegovina	6	2
2013-01-16	Vallianatos and Others v. Greece	2	1
2013-01-30	Fernandez Martinez v. Spain	21	7
2013-02-13	Janowiec and Others v. Russia	0	0
2013-03-06	O'Keeffe v. Ireland	8	2
2013-03-20	Del Rio Prada v. Spain	2	1
2013-04-03	Soderman v. Sweden	8	4
2013-05-15	Vuckovic and Others v. Serbia	10	3
2013-06-26	Margus v. Croatia	5	3
2013-07-10	Alisic and Others v. Bosnia and Herzegovina, Croatia, Serbia, Slovenia and "the Former Yugoslav Republic of Macedonia"	9	4
2013-09-04	Center for Legal Resources on behalf of Valentin Campeanu v. Romania	9	6
2013-09-18	Svinarenko and Slyadnev v. Russia	1	1
2013-10-02	Mocanu and Others v. Romania	6	3
2013-11-13	Jeunesse v. the Netherlands	14	8
2013-11-27	S.A.S. v. France	10	3
2013-12-11	Hassan v. the United Kingdom	15	7
2014-01-22	Chiragov and Others v. Armenia	15	6
2014-02-05	Sargsyan v. Azerbaijan	5	3
2014-02-12	Tarakhel v. Switzerland	5	2
2014-02-19	Jaloud v. the Netherlands	13	6
2014-04-16	Mustafa Tunc and Fecire Tunc v. Turkey	11	5
2014-05-21	Morice v. France	5	4
2014-06-04	Vasiliauskas v. Lithuania	14	7
2014-06-18	Parillo v. Italy	16	6
2014-07-09	Delfi AS v. Estonia	17	5
2014-09-03	Khoroshenko v. Russia	10	3
2014-09-24	Roman Zakharov v. Russia	8	4
2014-10-08	Bouyid v. Belgium	9	1
2014-11-12	Gherghina v. Romania	12	6
2014-12-03	F.G. v. Sweden	10	5
2014-12-10	Al-Dulimi and Montana Management Inc. v. Switzerland	8	5
2014-12-17	Pentikainen v. Finland	17	8
2015-01-07	Lambert and Others v. France	9	1
2015-01-14	Murray v. the Netherlands	10	5

Date	Case	Units	Askers
2015-01-21	Dvorski v. Croatia	9	8
2015-01-28	Perincek v. Switzerland	2	1
2015-02-04	Mozer v. the Republic of Moldova and Russia	3	2
2015-03-04	Schatschaschwili v. Germany	3	2
2015-04-01	Biao v. Denmark	7	4
2015-04-08	Avotins v. Latvia	11	4
2015-04-15	Couderc and Hachette Filipacchi Associes v. France	5	2
2015-05-13	Bedat v. Switzerland	5	4
2015-05-20	de Tommaso v. Italy	12	2
2015-06-03	Izzettin Dogan and Others v. Turkey	14	4
2015-06-10	Armani Da Silva v. the United Kingdom	8	4
2015-06-17	Baka v. Hungary	6	3
2015-07-01	Jeronovics v. Latvia	0	0
2015-07-08	Karacsony and Others v. Hungary	3	2
2015-09-02	G.I.E.M s.r.l v. Italy	5	4
2015-09-16	Paposhvili v. Belgium	2	0
2015-10-07	Buzadji v. Republic of Moldova	8	2
2015-10-21	Hutchinson v. the United Kingdom	8	4
2015-11-04	Magyar Helsinki Bizottsag v. Hungary	10	4
2015-11-25	Ibrahim and Others v. the United Kingdom	14	5
2015-12-02	Dubska and Krejzova v. the Czech Republic	4	2
2015-12-09	Paradiso and Campanelli v. Italy	9	2
2015-12-16	Belane Nagy v. Hungary	11	5
2016-01-06	Mursic v. Croatia	3	3
2016-01-13	A and B v. Norway	4	2
2016-01-27	Lhermitte v. Belgium	9	3
2016-02-24	J.K. and Others v. Sweden	1	1
2016-03-02	Lupeni Greek Catholic Parish and Others v. Romania	14	5
2016-04-20	Khamtokhu and Aksenchik v. Russia	8	5
2016-05-25	V.M. and Others v. Belgium	7	2
2016-06-01	Moreira Ferreira v. Portugal (No. 2)	7	3
2016-06-22	Khlaifia and Others v. Italy	13	2
2016-07-06	Simeonovi v. Bulgaria	12	7
2016-08-31	Medzlis Islamske zajednice Brcko and Others v. Bosnia and Herzegovina	9	5
2016-09-14	Satakunnan Markkinaporssi Oy and Satamedia Oy v. Finland	8	2
2016-10-12	Karoly Nagy v. Hungary	17	5
2016-10-19	Regner v. the Czech Republic	15	6
2016-11-09	Fabian v. Hungary	16	8
2016-11-16	Lopes de Sousa Fernandes v. Portugal	11	6
2016-11-30	Barbulescu v. Romania	14	4
2017-01-11	Harkins v. the United Kingdom	9	4
2017-01-25	Garib v. the Netherlands	8	4
2017-02-08	Correia de Matos v. Portugal	8	5
2017-03-08	Merabishvili v. Georgia	2	1
2017-03-22	Ramos Nunes De Carvalho e Sa v. Portugal	5	3
2017-06-14	Nait-Liman v. Switzerland	7	3
2017-07-12	Zubac v. Croatia	4	2
2017-10-18	Denisov v. Ukraine	4	3
2017-11-15	Nicolae Virgiliu Tanase v. Romania	5	2
2017-11-22	Berlusconi v. Italy	11	3

Date	Case	Units	Askers
2017-11-29	Ilnseher v. Germany	14	5
2017-12-06	Molla Sali v. Greece	12	7
2017-12-20	Beuze v. Belgium	10	5
2018-01-17	S., V. and A. v. Denmark	7	4
2018-01-24	Navalnyy v. Russia	8	4
2018-02-14	Murtazaliyeva v. Russia	12	6
2018-03-07	Fernandes de Oliveira v. Portugal	10	4
2018-03-14	Lekic v. Slovenia	16	6
2018-03-28	Guzelyurtlu and Others v. Cyprus and Turkey	3	3
2018-04-18	Ilias and Ahmed v. Hungary	8	4
2018-04-18	Z.A. and Others v. Russia	9	1
2018-05-23	Georgia v. Russia (II)	0	0
2018-06-06	Rooman v. Belgium	7	3
2018-09-26	N.D. and N.T. v. Spain	22	9
2018-10-03	Mihalache v. Romania	4	3
2018-10-17	Strand Lobben and Others v. Norway	5	3
2018-11-21	Magyar Ketfarku Kutya Part v. Hungary	8	5
2018-11-28	Lopez Ribalda and Others v. Spain	16	4
2019-04-24	M.N. and Others v. Belgium	13	4
2019-05-15	S.M. v. Croatia	7	3
2019-06-12	Slovenia v. Croatia	9	5
2019-07-10	Big Brother Watch and Others v. the United Kingdom	19	6
2019-07-10	Centrum for rattvisa v. Sweden	9	2
2019-09-11	Ukraine v. Russia (re Crimea)	12	4
2019-09-18	Selahattin Demirtas v. Turkey	18	7
2019-09-25	Muhammad and Muhammad v. Romania	20	4
2019-10-09	Gestur Jonsson and Ragnar Halldor Hall v. Iceland	10	5
2019-12-04	Mugemangango v. Belgium	3	1
2019-12-18	Albert and Others v. Hungary	9	5
2020-01-15	X and Others v. Bulgaria	16	4
2020-02-05	Gudmundur Andri Astradsson v. Iceland	19	7
2020-02-26	Hanan v. Germany	11	6
2020-06-10	M.A. v. Denmark	11	7
2020-06-17	Kurt v. Austria	16	7
2020-06-24	Savran v. Denmark	12	6
2020-07-01	Vavricka v. the Czech Republic	20	7
2020-10-14	NIT S.R.L. v. the Republic of Moldova	16	6
2020-10-21	Denis and Irvine v. Belgium	6	4
2021-01-20	Khasanov and Rakhmanov v. Russia	13	5
2021-01-27	Abdi Ibrahim v. Norway	12	6
2021-05-19	Grzeda v. Poland	11	6
2021-05-26	Savickis and Others v. Latvia	8	4
2021-06-16	Beeler v. Switzerland	11	5
2021-07-07	Vegotex International S.A. v. Belgium	4	3
2021-09-29	H.F. and Others v. France	12	5
2021-11-03	L.B. v. Hungary	20	9
2022-01-26	Ukraine and the Netherlands v. Russia	21	10
2022-02-02	Halet v. Luxembourg	13	6
2022-02-23	Sanchez-Sanchez v. the United Kingdom	13	5
2022-02-23	McCallum v. Italy	6	4
2022-03-09	Hurbain v. Belgium	10	5
2022-03-23	Macate v. Lithuania	18	8

Date	Case	Units	Askers
2022-06-29	Sanchez v. France	19	8
2023-01-18	Yuksel Yalcinkaya v. Turkiye	4	4
2023-03-01	Humpert and Others v. Germany	14	7
2023-03-29	Careme v. France	18	9
2023-03-29	Verein KlimaSeniorinnen Schweiz and Others v. Switzerland	8	4
2023-04-12	Communaute genevoise d'action syndicale (CGAS) v. Switzerland	7	4
2023-07-05	Nealon and Hallam v. the United Kingdom	6	5
2023-07-12	Fabbri and Others v. San Marino	18	6
2023-09-27	Duarte Agostinho and Others v. Portugal and 32 Others	18	11
2024-01-10	Pindo Mulla v. Spain	33	12
2024-03-06	Ships Waste Oil Collector B.V. and Others v. the Netherlands	17	6
2024-05-15	Semenya v. Switzerland	16	7
2024-06-12	Ukraine and the Netherlands v. Russia	12	3
2024-09-18	Mansouri v. Italy	19	8
2024-11-20	Kovacevic v. Bosnia and Herzegovina	44	10
2024-12-18	Danilet v. Romania	22	10
2025-02-12	R.A. and Others v. Poland	14	7
2025-02-12	H.M.M. and Others v. Latvia	13	6
2025-02-12	C.O.C.G. and Others v. Lithuania	15	7
2025-02-26	Tsaava and Others v. Georgia	14	8
2025-05-07	Yasak v. Turkiye	25	9
2025-09-17	Jesus Pinhal v. Portugal	14	6
2025-11-19	Grande Oriente d'Italia v. Italy	18	8
2026-01-21	Kuijt v. the Netherlands	35	11
2026-03-04	Tergek v. Turkiye	24	8
2026-03-25	Kavala v. Turkiye	11	6
2026-04-01	S.O. v. Spain	23	8

Note: Units counts the question units in the record. Askers counts the judges to whom the record attributes at least one question unit.

D Additional figures

Table A.2: Speaking time by state of election

State	Judges	Sittings	Asked (%)	Seconds per sitting	Seconds when asking	Adjusted difference	Most active judge (share of the state's question time)
Portugal	3	83	47	77	165	+51	Paulo Pinto de Albuquerque (84%)
Ireland	3	83	48	63	131	+34	Síofra O'Leary (57%)
Spain	3	93	48	57	118	+33	María Elósegui (51%)
Iceland	3	110	34	56	167	+30	Robert Spano (93%)
Slovenia	3	87	36	55	153	+24	Marko Bošnjak (58%)
Romania	3	72	31	51	168	+23	Iulia Antoanella Motoc (95%)
Hungary	3	78	29	46	155	+16	András Sajó (93%)
Netherlands	3	71	34	45	133	+18	Egbert Myjer (45%)
Norway	3	94	23	37	159	+10	Arnfinn Bårdsen (86%)
Latvia	3	91	27	36	131	+11	Ineta Ziemele (88%)
Germany	4	127	35	36	103	+9	Angelika Nußberger (58%)
Albania	3	85	31	34	112	+10	Darian Pavli (79%)
Poland	3	72	35	34	97	+9	Krzysztof Wojtyczek (63%)
Croatia	3	104	38	32	83	+7	Ksenija Turković (43%)
Malta	3	90	26	29	113	+6	Vincent A. De Gaetano (76%)
France	3	143	29	29	100	+7	Mattias Guyomar (44%)
United Kingdom	4	138	14	26	176	+1	Tim Eicke (68%)
Finland	3	82	23	25	106	+0	Pauliine Koskelo (53%)
Russia	3	64	25	24	97	−6	Dmitry Dedov (72%)
Greece	3	139	26	23	90	+0	Linos-Alexandre Sicilianos (56%)
Lithuania	3	65	18	22	121	−7	Egidijus Kūris (59%)
Denmark	3	121	17	22	131	−2	Jon Fridrik Kjølbro (96%)
Slovakia	2	66	20	21	108	−4	Ján Šikuta (90%)
Belgium	3	125	21	21	102	−0	Paul Lemmens (85%)
Luxembourg	3	133	26	21	80	+1	Dean Spielmann (57%)
Turkey	3	107	24	17	68	−16	Işıl Karakaş (54%)
Georgia	3	82	15	16	108	−11	Lado Chanturia (100%)
Austria	3	78	17	15	93	−13	Gabriele Kucsko-Stadlmayer (73%)
Italy	3	138	10	14	142	−10	Raffaele Sabato (77%)
Switzerland	3	78	18	14	80	−15	Andreas Zünd (56%)
Ukraine	3	63	16	14	88	−11	Ganna Yudkivska (75%)
Armenia	3	57	19	13	70	−15	Alvina Gyulumyan (69%)
Montenegro	2	62	21	13	64	−14	Nebojša Vučinić (56%)
Liechtenstein	3	103	16	13	82	−9	Mark Villiger (56%)
San Marino	3	62	11	13	112	−13	Gilberto Felici (74%)
Andorra	3	149	16	12	77	−5	Pere Pastor Vilanova (89%)
Bulgaria	4	87	17	12	68	−13	Zdravka Kalaydjieva (62%)
Bosnia and Herzegovina	2	70	10	11	111	−18	Faris Vehabović (85%)
Azerbaijan	2	73	8	10	119	−14	Latif Hüseynov (89%)
Cyprus	3	83	7	9	122	−12	Georgios A. Serghides (85%)
Estonia	3	60	7	9	132	−16	Julia Laffranque (77%)
Serbia	3	66	17	8	46	−15	Dragoljub Popović (52%)
Sweden	3	86	10	7	70	−20	Elisabet Fura (41%)
Monaco	2	104	8	7	86	−17	Stéphanie Mourou-Vikström (63%)
Moldova	4	62	13	6	47	−18	Valeriu Griţco (78%)
Czechia	3	76	9	6	63	−22	Kateřina Šimáčková (45%)
North Macedonia	3	92	2	1	63	−20	Mirjana Lazarova Trajkovska (100%)

Note: Titular judges in Grand Chamber hearings. Speaking time counts seconds in question units attributed to a judge and excludes procedural speech by the presiding judge. The adjusted difference is the mean residual, in seconds, from a model with hearing fixed effects and position on the bench. We order states by seconds per sitting and group judges by state of election. A judge may hold a different nationality.

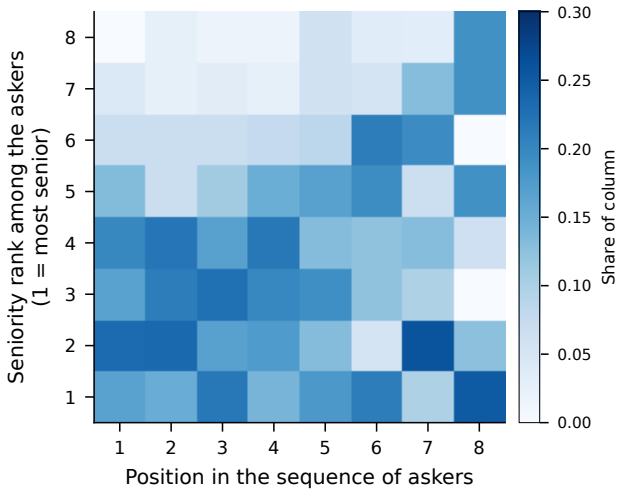

Figure A.1: Sequence of questioning and seniority. The figure includes hearings in which at least four judges asked questions. Columns show the sequence in which judges asked, and rows show each judge's seniority rank among those who asked.

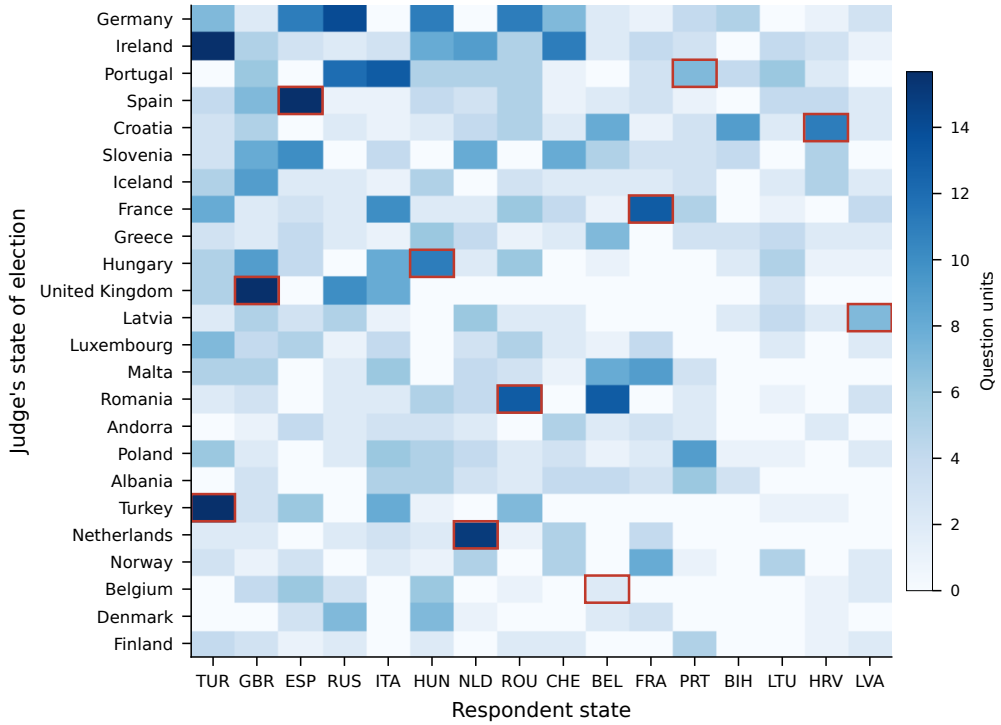

Figure A.2: Question counts by state of election and respondent state. The figure counts question units for the most frequently represented states of election and first respondent states. Outlined cells mark questions from national judges.

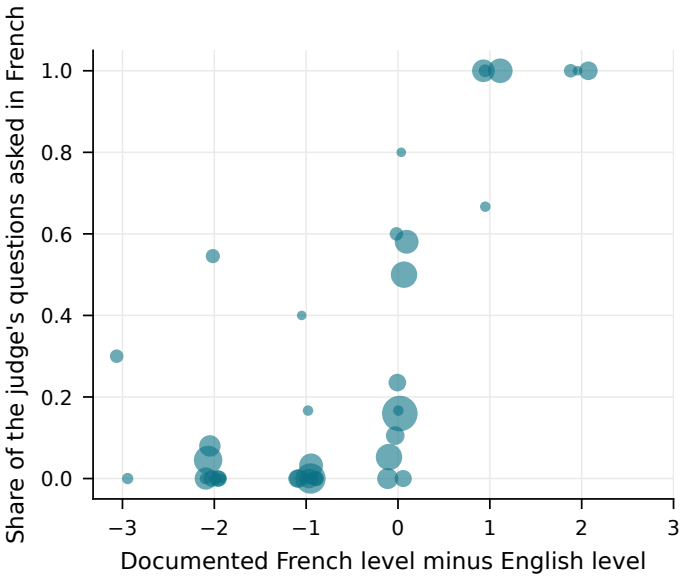

Figure A.3: Documented proficiency and language of questions. The figure includes judges with at least five questions in recordings through 2021. Marker size is proportional to the number of questions, and horizontal positions are jittered.

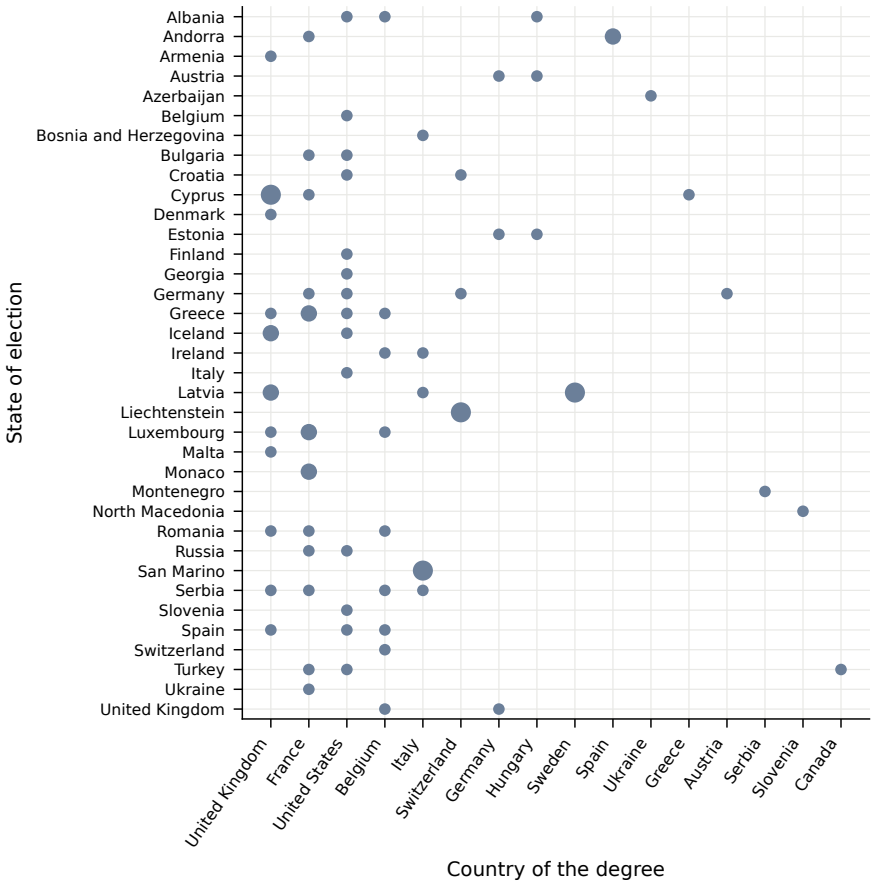

Figure A.4: Degrees earned abroad. The figure shows degrees from outside the state of election by state of election and the country in which the degree was earned. Marker size is proportional to the number of judges.

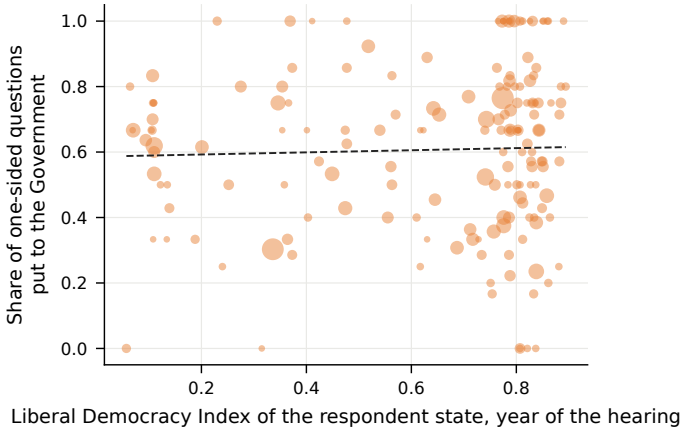

Figure A.5: Questions to the Government and democracy in the respondent state. Each point represents a hearing with at least three questions addressed to one party. Marker size is proportional to the number of such questions.

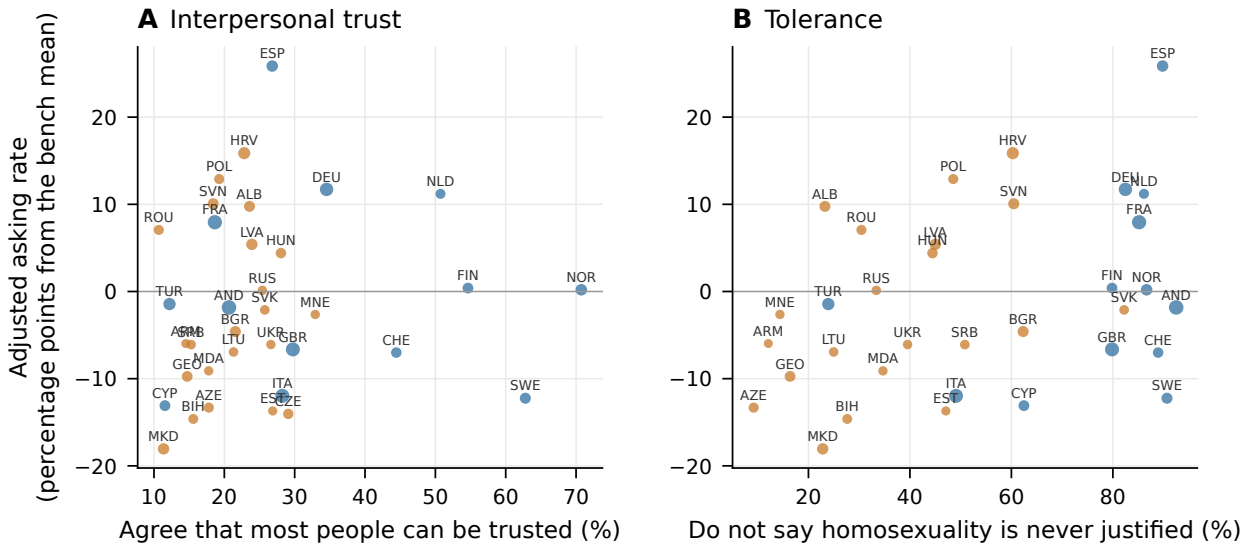

Figure A.6: Questioning and components of the self-expression proxy. The figure follows Figure 13 and plots the two components of the proxy. It excludes twelve states for which the source provides no survey value.

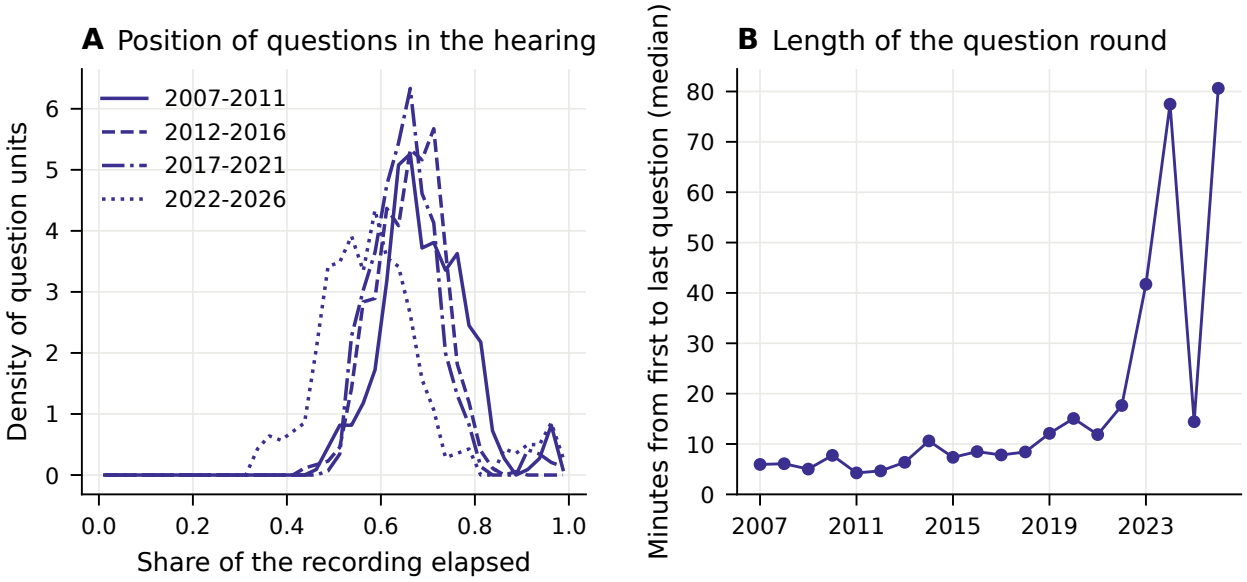

Figure A.7: Timing of questions. Panel A shows the density of question units over the normalized length of the recording, by period. Panel B shows the median elapsed time between the first and last questions of a hearing, by year.

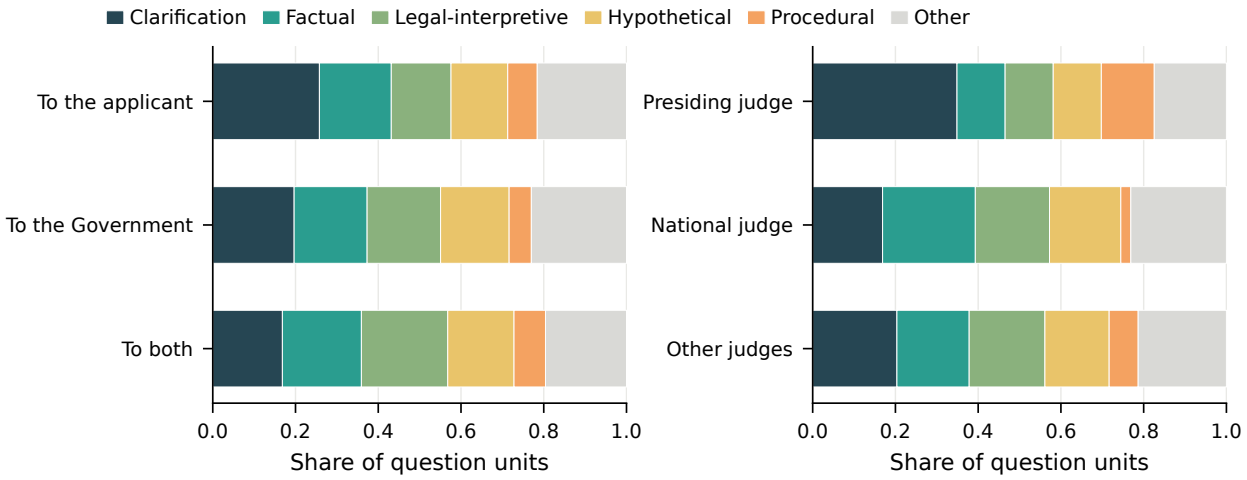

Figure A.8: Question types by addressee and judicial role. The figure uses the dictionary classification to group questions by addressee and by the position of the judge who asked.

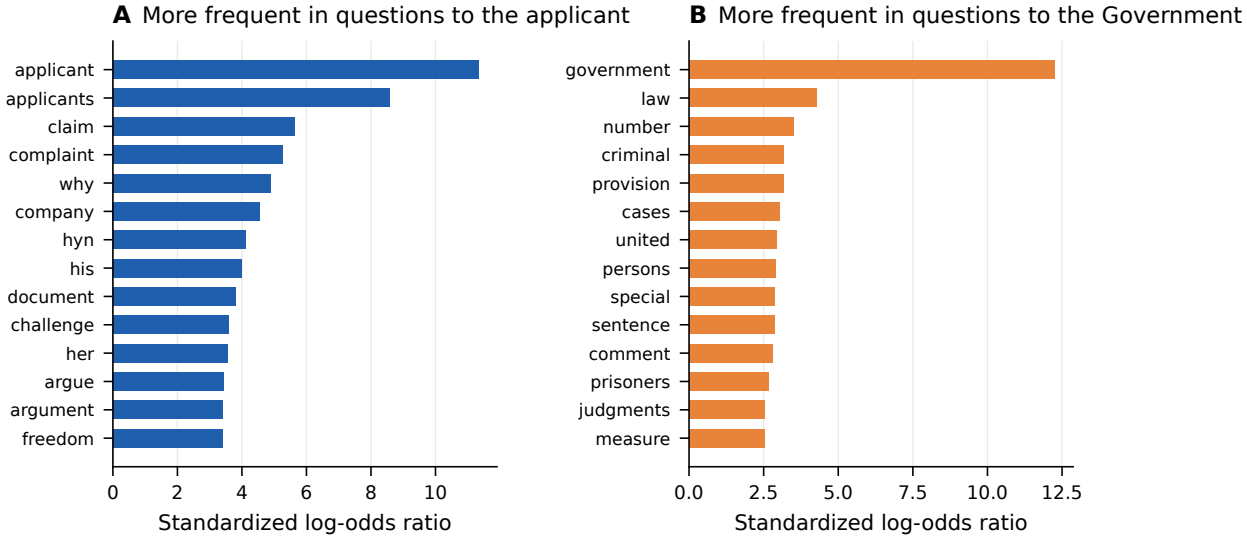

Figure A.9: Words characteristic of questions to each side. For questions in English, we identify these words using the log-odds ratio with an informative Dirichlet prior (Monroe et al., 2008). We exclude words used in fewer than ten hearings.

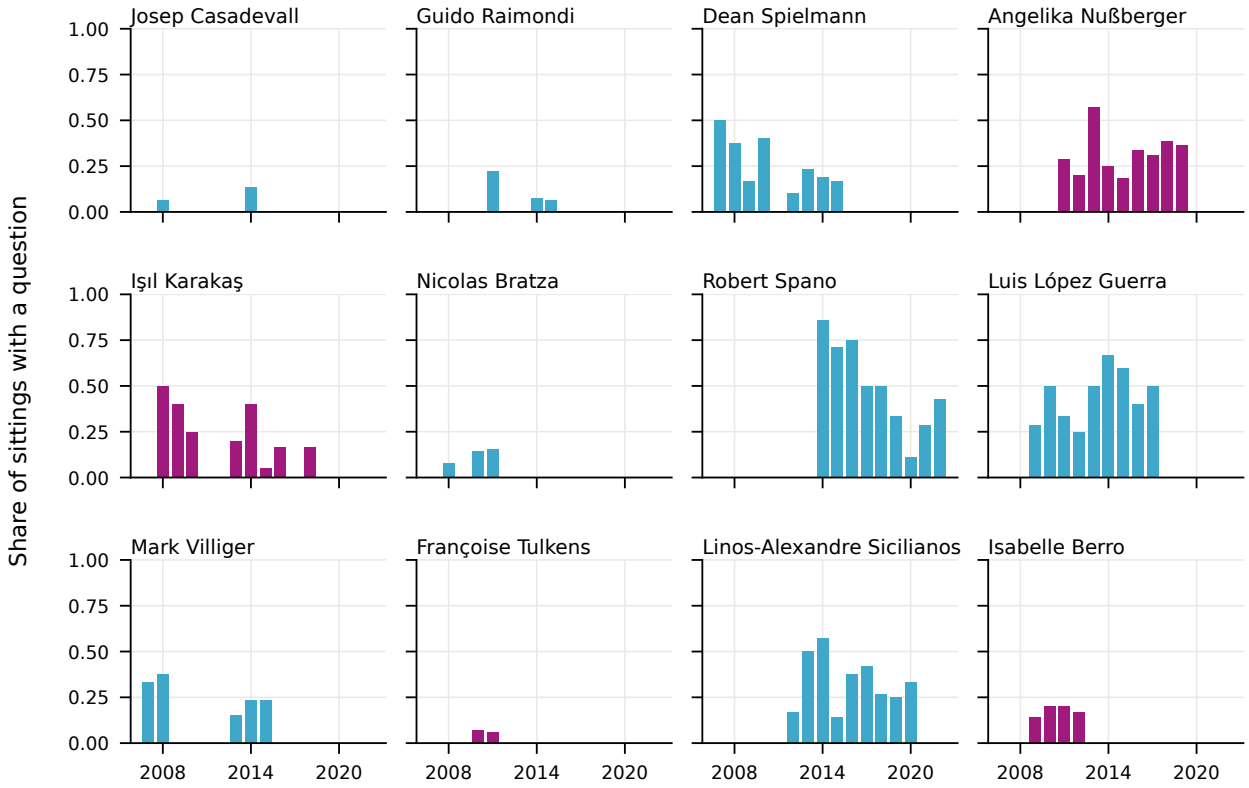

Figure A.10: Questioning rates by judge and year. The figure shows the share of sittings with a question by year for the twelve judges with the most sittings.

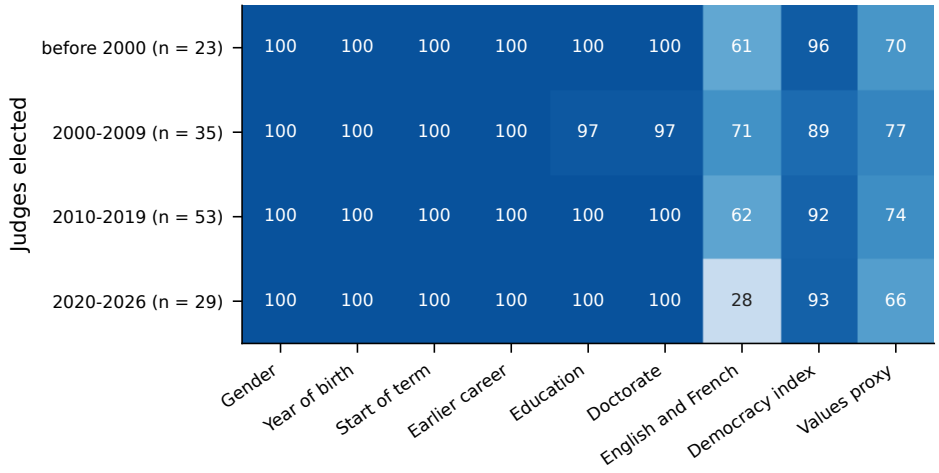

Figure A.11: Coverage of judicial biographies. For each period of election, the figure shows the percentage of judges in the main sample for whom we observe each variable.

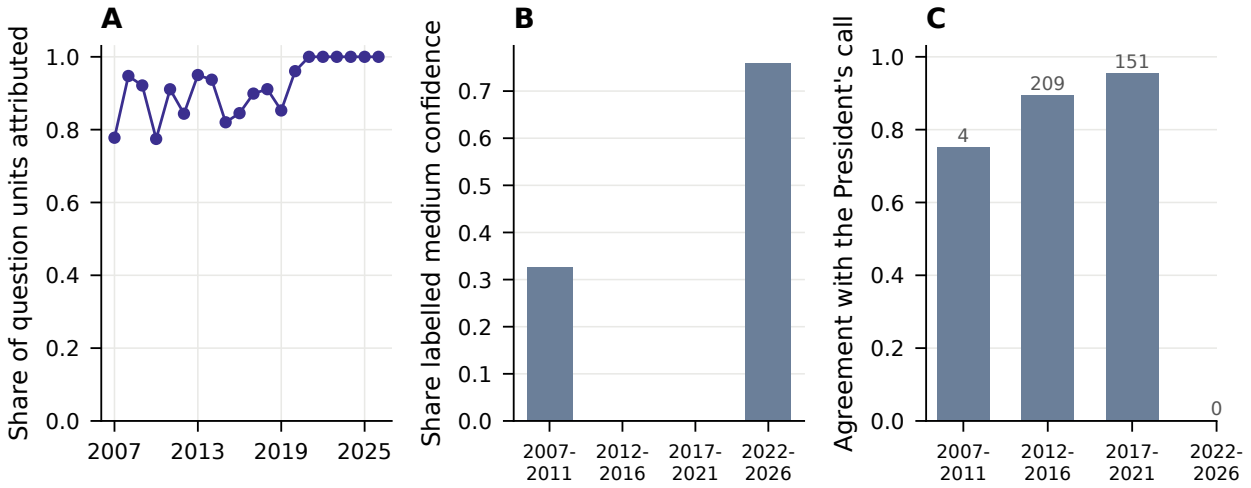

Figure A.12: Attribution coverage, confidence, and agreement. Panel A shows the share of question units attributed to a judge by year. Panel B shows the share of attributed units labeled medium confidence. Panel C shows agreement between the attributed judge and the judge named in a logged call by the President, along with the number of question turns.

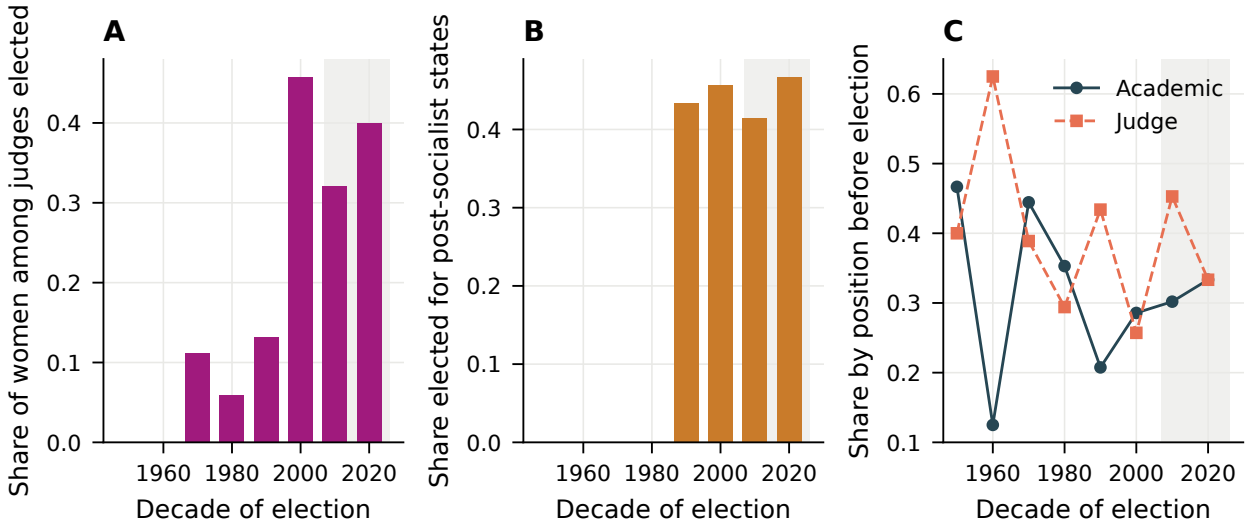

Figure A.13: Decade of election for judges serving since 1959. The figure groups all judges in the judge file by decade of election. The shaded band marks the period covered by the recordings.

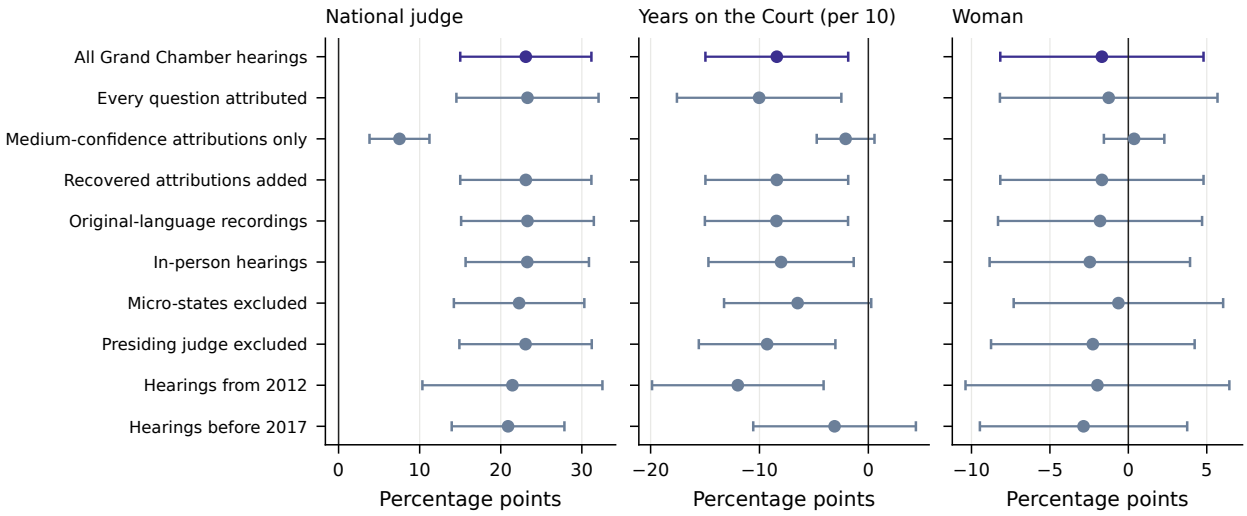

Figure A.14: Baseline estimates under alternative samples and outcome definitions. Point estimates and 95 percent intervals from Table A.1.

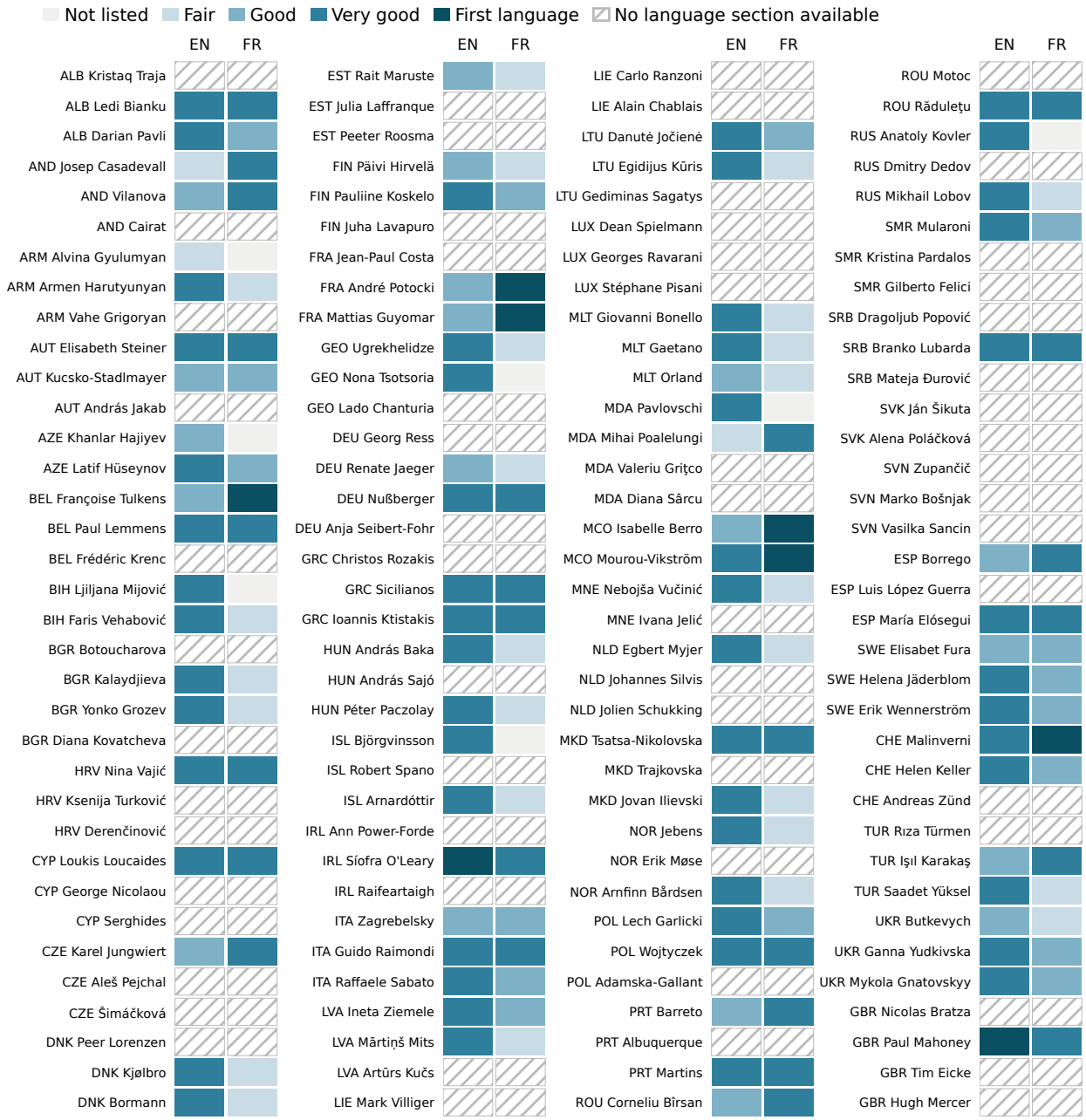

Figure A.15: Documented speaking proficiency by judge. The figure shows speaking levels in English and French for each judge in the main sample, ordered by state of election.