Facing the Far Right, or Looking Away? Video Evidence from Parliament

Tim Leffler*

This version: November 10, 2026

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Abstract

Legislators do not only cast votes: they allocate public attention, and how much of it a far-right party receives is decided speech by speech. Confronting its claims may give it publicity; withholding attention may leave them uncontested. I study how legislators from established parties respond to Germany's far-right AfD. To capture these responses, I build a new corpus of more than 23,000 parliamentary speeches combining words, images, and sound from the recordings. I measure engagement through whether a legislator names the party and how much of a speech they spend turned toward its members, a form of attention observable only in the recordings. Committee seats cannot be divided, so the AfD's share of a legislator's committee colleagues differs across committees of different sizes. Across 9,376 speeches by 269 legislators, increasing that share by 3.2 percentage points—from the lowest to the highest exposure observed—reduces engagement by 0.41 standard deviations. Legislators name the AfD less often and spend a smaller share of each speech turned toward its members. The decline in naming is concentrated in negatively worded sentences. These findings show how sustained interaction with far-right legislators changes the public attention individual politicians give that party.

Keywords: Political Economy, Far Right, Populism, Legislative Behavior, Legislative Institutions, Multimodal Measurement
JEL Classification: D71, D72, C55, C81

*Munich Graduate School of Economics (MGSE), JMU Würzburg. Email: tim.leffler@econ.lmu.de.
I am grateful to Fabian Kosse and Florian Englmaier for their advice and their support at every stage of this project. For comments that sharpened the paper I thank Chad Kendall, Matthias Lang, Carla Mirabella, and participants at the Empirical Student Brown Bag Seminar, the OrgEcon Research Lunch Seminar and the 3rd Interdisciplinary Workshop on Text and Unstructured Data at LMU; the C-BEAM Seminar at the University of Würzburg; and the AI & Economics Lab at ETH Zurich. Ecem Yargici and Thomas Vollmuth provided excellent research assistance. Financial support from the Munich Graduate School of Economics, JMU Würzburg, and the German Research Foundation (DFG) through CRC/TRR 190 (Project number 280092119) is gratefully acknowledged. All errors are my own.

1 Introduction

Mainstream legislators who share a parliament with a far-right party must decide how much public attention to give it. Challenging its claims risks lending it standing; withholding attention risks leaving those claims uncontested. As far-right parties have become enduring features of Western party systems, research has traced where their votes come from and how mainstream parties adjust their platforms in response (Guriev and Papaioannou 2022, Meguid 2005), but how their entry changes the day-to-day conduct of the politicians already in office has received far less attention. Legislators do not only cast votes: they allocate scarce public attention, respond to arguments, and signal which actors count as legitimate participants in debate. In this paper I ask how this choice changes when legislators have to work alongside members of such a party.

I study this question in the context of Germany's 2017 parliamentary election, when a far-right party won seats in the national parliament for the first time since 1949. I compare how individual legislators' public conduct changes with the share of colleagues from the far-right party they regularly work alongside in parliamentary committees. These smaller groups bring legislators from opposing parties together to work on particular policy areas, with parties' seat shares set by an allocation rule rather than by the legislators themselves.

A party's refusal to cooperate with the far right does not settle how its individual legislators respond in public debate. They may name the party, address its representatives, or turn toward its benches. These repeated public interactions can reinforce or qualify the distance their parties formally maintain. Such public engagement can give a far-right party visibility and recognition, even when intended as opposition. Political developments can change the perceived acceptability of prejudice and support for the radical right (Bursztyn, Egorov, and Fiorin 2020, Valentim 2021), and wider circulation of far-right messages can have consequences beyond electoral competition. For example, Müller and Schwarz (2021) link anti-refugee sentiment on the Facebook page of Germany's largest far-right party to violence against refugees.

Repeated interaction in committees may change how legislators publicly engage the party. Research on intergroup contact shows that collaboration and competition can produce different responses (Lowe 2021). Evidence from the European Parliament shows that nearby colleagues from the same party can vote more alike (Harmon, Fisman, and Kamenica 2019). Committee work requires continued interaction within the same insti-

tution, while legislators' public responses are observed by voters. Repeated interaction could weaken a legislator's response as they become accustomed to the party's members. Alternatively, it could lead the legislator to deliberately withhold attention that would give the party publicity. In either case, legislators might mention the party less often and turn toward its members less. A decline in references alone therefore cannot distinguish these explanations. The recordings allow me to examine whether visible attention also falls and whether the references that remain are delivered more calmly, helping assess what reduced engagement reflects.

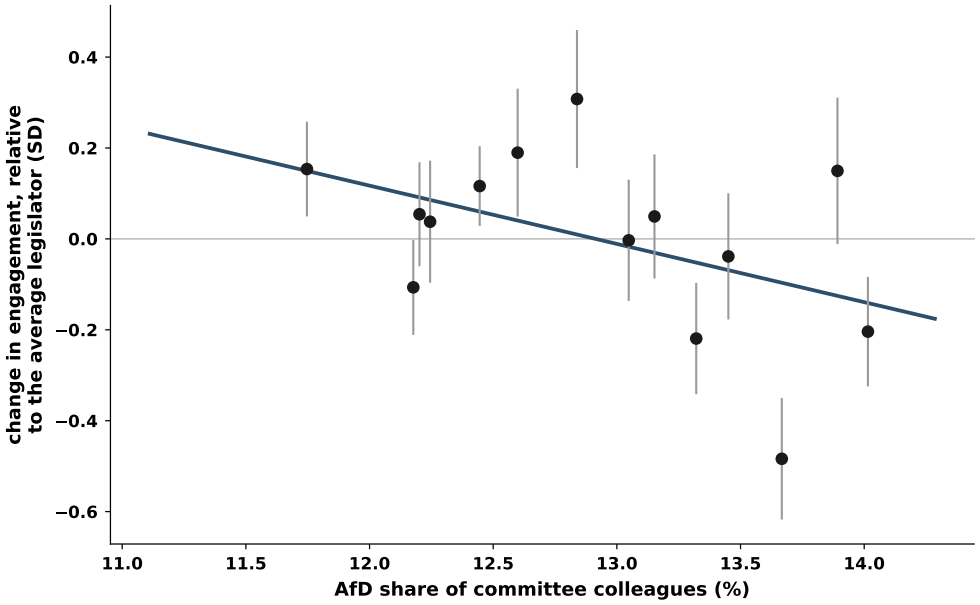
The main outcome is engagement with the far-right Alternative für Deutschland (AfD): the public attention legislators direct toward the party. It combines explicit references with visible orientation toward its benches. Its verbal component indicates whether a speech names the AfD; its visual component is the share of aligned words assigned to sustained orientation toward its benches. Speakers systematically turn toward the parliamentary group they name, providing evidence that head orientation captures a meaningful aspect of whom they address. The images and sound of the recordings also reveal gestures and variation in pitch and loudness, allowing me to examine how legislators deliver their speeches and the references they make to the party. Engagement need not imply agreement or cooperation. I build these measures from more than 23,000 parliamentary speeches delivered between 2013 and early 2020, synchronizing transcripts, images, and sound at the level of the individual spoken word. This alignment lets me examine the behavior accompanying references to particular parties. The measures are behavioral proxies. Head orientation is not eye tracking, and gesture and acoustic measures do not capture emotions.

To estimate how committee exposure changes engagement, I analyze 9,376 speeches by 269 legislators who retained at least one committee across the two parliamentary terms. Before the AfD entered the German parliament (Bundestag) in October 2017, these legislators had no AfD colleagues in their parliamentary committees; afterward, every committee included AfD members. A proportional allocation rule determines the AfD's share of committee seats. Seats must be assigned as whole numbers, so the AfD's share differs across committees of different sizes even though all allocations use the same national party strengths. I combine these differences in exposure with observations of the same legislators in the preceding parliamentary term, before the AfD entered parliament. The treatment is the average share of AfD colleagues across a legislator's committees after the party's entry, following the committee-based design introduced by Esguerra et al.

(2023). I estimate whether the behavior of the same politician changes differentially after 2017 with the intensity of that exposure.

I report three main findings. First, sustained committee exposure reduces public engagement with the AfD. Moving from the lowest to the highest committee exposure in the sample lowers engagement by 0.41 standard deviations (Fig. 1). This contrast is a 3.2-percentage-point increase in the AfD share of committee colleagues. More- and less-exposed legislators show no differential trend before entry. The gap opens with the AfD's entry and persists across the post-entry period (Fig. 5). A speech becomes 11.5 percentage points less likely to name the AfD, about 40 percent of the post-entry mean, and the share of aligned words assigned to sustained orientation toward its benches falls by 0.27 standard deviations, although attention is the less robust of the two facets (Section 5.2). Holding committee size fixed, the naming estimate corresponds to an 8.5-percentage-point decline per additional AfD colleague on an average-sized committee of 39 members.

FIGURE 1: COMMITTEE EXPOSURE AND CHANGES IN ENGAGEMENT



Notes: Each point represents one of fourteen equal-count groups of the 254 legislators observed speaking before and after the AfD's entry, sorted by committee exposure. The vertical axis shows the change in mean engagement, in standard deviations, after subtracting the average change across legislators. It therefore shows differential changes rather than the overall increase following entry. Vertical lines indicate standard errors of the group means. The fitted line uses the underlying legislator-level observations.

Second, mentions in negatively worded sentences fall by almost two thirds, whereas other mentions decline much less. The decline therefore falls mainly on a form of engagement associated with confrontation. Both habituation and strategic avoidance could explain this decline.

To assess these explanations, I examine how legislators deliver the remaining references and whether greater committee exposure weakens their response immediately after an AfD speech. Comparing legislators within party and quarter rather than following the same legislator, I find that the sentence in which a more-exposed legislator names the AfD is spoken at a higher pitch and louder relative to the rest of the same speech, although its wording is less negative. I do not detect a weaker turn toward the AfD benches right after an AfD member has spoken among the most exposed; that estimate is imprecise. Evidence from televised U.S. House debates also shows that legislators tailor their public behavior to who is watching. Members whose districts have more viewers use more emotive language (Gennaro and Ash 2026). Taken together, the patterns in this paper are more consistent with strategic avoidance than with habituation. However, legislators may reserve their remaining references for occasions that provoke a stronger response, so greater vocal emphasis does not by itself rule out habituation.

Third, speech delivery, measured jointly through gesture and variation in pitch and loudness, shifts toward the AfD's delivery profile by 0.21 standard deviations. Exposure lowers gesture and loudness variation and raises pitch variation, although the individual estimates are imprecise and the placebo using the Free Democratic Party (FDP) is significant for loudness. The shift is not a move toward how inexperienced legislators speak, and exposure to the FDP does not produce it. The FDP, however, differs from the established parties in a similar direction on some dimensions, so the data cannot establish that legislators adopt a distinctively AfD delivery profile.

An additional analysis shows that electoral competition separates the two forms of engagement. Where a legislator's party faces a closer race against the AfD, the estimated decline in naming becomes smaller and approaches zero, while the estimated response in visible orientation remains negative. The difference between the two interactions is statistically significant and persists after controlling for East–West differences. The recordings reveal a distinction that the frequency of references alone would miss (Section 6.4).

The engagement estimate is stable under controls for committee size and speech topics. Because the estimates are conditional on taking the floor, I also examine selection into speaking. Equal weighting of legislators leaves the estimate unchanged, and both esti-

mated Lee (2009) bounds on engagement are negative (Appendix E). Inference based on how committee seats are allocated supports the engagement result, with $p = 0.044$ in the baseline and $p = 0.08$ after adjusting exposure for its expected value following Borusyak and Hull (2023) (Section C.4).

The German setting is particularly informative about engagement with a far-right party. The AfD was the first far-right party to win seats in a Bundestag election since 1949.[1] The boundaries around public engagement with the far right are also unusually explicit. Mainstream parties rule out cooperation with the AfD (Heinze 2022), and parliament has denied it leadership positions that other parliamentary groups routinely receive, so any change in engagement is observed against a setting where engagement is contested (Section 2). This distance is also visible in individual legislators' responses during debate. Legislators at the lectern accept 45 percent of requests from AfD members to interrupt with a question, against 70 percent of requests from the other opposition groups. The gap in accepted interruption requests persists when comparing requests put to the same speaker, with an AfD request 22 percentage points less likely to be granted, and AfD speeches draw more heckling than those of any other group (Appendix Figure A1). These differences do not by themselves show whether withholding attention limits the party's influence. Committee exposure does not measurably change speakers' willingness to accept AfD members' requests to interrupt with a question (Appendix G).

Several studies are closely related. Esguerra et al. (2023) uses the same institutional variation and committee data. It shows that exposure to AfD colleagues leads mainstream legislators to use more right-wing and populist language; I study their public engagement with the party, measured through explicit references and visible orientation. Read together, the two results suggest that exposure moves mainstream legislators' rhetoric toward the AfD's while they engage the AfD itself less. Arnold and Küpfer (2024) demonstrate how words, images, and sound can be synchronized in parliamentary recordings. Following this approach, I develop my own processing pipeline to measure public engagement through explicit references and visible orientation, validate orientation against speakers' naming behavior, and study how engagement changes with rule-induced committee exposure. Other work measures legislators' nonverbal conduct from floor record-

[1] I use *far right* in the sense of Mudde (2007). The PopuList (Rooduijn et al. 2024) classifies the AfD as both populist and far right during the study period, and Arzheimer and Berning (2019) document its move toward the radical right between 2013 and 2017. I emphasize its far-right status because the question concerns public engagement in a setting where cooperation and recognition are contested. The design does not separately identify the roles of the party's far-right and populist characteristics.

ings: how often they cross the aisle (Dietrich 2021), the emphasis with which they deliver their speeches (Rittmann, Ringwald, and Nyhuis 2025), and their vocal arousal when they address other parties (Rask and Hjorth 2025). These studies relate such conduct to polarization, public opinion, and the party being addressed; I ask how it responds to sustained contact with a far-right party. Arnold, Küpfer, and Stecker (2026) study how legislators react in the moments after an AfD speech. I estimate the effect of sustained committee exposure, using the preceding parliamentary term as a pre-entry comparison. Koch and Küpfer (2025) show that legislators choose which debates to seek and which to avoid; I study engagement with another party within speeches rather than the choice of which debates to enter.

The paper contributes to three literatures. First, it contributes to the political economy of populism and the far right, which has concentrated on the demand side: why voters turn to these parties and to more extreme candidates, with economic shocks such as import competition as a leading explanation (Guriev and Papaioannou 2022, Autor et al. 2020, Dippel et al. 2022). Other research examines how persistent political preferences interact with the availability of new party platforms to shape far-right electoral support (Cantoni et al. 2026), and how electoral success makes previously stigmatized views easier to express openly (Bursztyn, Egorov, and Fiorin 2020). Related work examines the consequences of political communication beyond electoral behavior: Grosjean, Masera, and Yousaf (2023) report an increase in the share of stopped drivers who are Black after Trump campaign rallies. Research on established parties' supply-side responses examines spatial and issue competition at the party level. Mainstream parties move toward far-right parties' positions or deny their issues salience (Meguid 2005, Abou-Chadi 2016, Abou-Chadi and Stoetzer 2020, van Spanje 2010, Hjorth and Larsen 2022, Abou-Chadi and Krause 2020), change their own rhetoric (Habersack and Werner 2023, Valentim and Widmann 2023), and coordinate to exclude far-right parties inside legislatures (Downs 2001, van Spanje and van der Brug 2007, Heinze 2022, Santos, Serra-Silva, and Silva 2025). I study the individual legislator, whose incentives need not coincide with the party's. The engagement measure captures public attention through explicit references and visible orientation; gesture and vocal delivery show how legislators deliver their speeches.

Second, the paper contributes to the economics of intergroup contact by bringing a contact design to political elites. Since Allport (1954), contact has been one of the most studied ways to change behavior toward outgroups (Paluck, Green, and Green 2019), and economists have estimated its effects using random roommate assignment in college

(Boisjoly et al. 2006, Corno, La Ferrara, and Burns 2022), the integration of poor students into elite schools (Rao 2019), and the random assignment of teammates and opponents in cricket leagues, where collaborative contact increases cross-caste friendships while adversarial contact tends to reduce cross-caste interaction (Lowe 2021). Studies of legislative proximity examine seating in the European Parliament, seat lotteries in the Icelandic parliament, and deskmates in the California Assembly (Harmon, Fisman, and Kamenica 2019, Saia 2018, Masket 2008). Their findings and causal interpretations differ: Darmofal, Finocchiaro, and Indridason (2025) find little evidence of voting convergence in Iceland and challenge the identifying assumptions behind Saia (2018). This setting links rule-induced committee exposure to the public conduct of individual legislators. Naming falls for the two parties absent from the previous Bundestag and not for the groups that sat in it, but only exposure to AfD colleagues produces the decline (Section C.5).

Third, the paper contributes to the use of communication data in economics, using parliamentary recordings to measure visible attention and speech delivery alongside explicit references. One strand measures partisan language and emotional appeals from transcripts (Gentzkow, Kelly, and Taddy 2019, Gentzkow, Shapiro, and Taddy 2019, Gennaro and Ash 2022), and the voice and facial expressions of central bankers and managers from audio and video (Gorodnichenko, Pham, and Talavera 2023, Alexopoulos et al. 2024, Curti and Kazinnik 2023, Mayew and Venkatachalam 2012). A second turns to politics, recovering the vocal pitch and visual expression of politicians and judges (Dietrich, Hayes, and O'Brien 2019, Dietrich, Enos, and Sen 2019, Knox and Lucas 2021, Boussalis et al. 2021, Torres and Cantú 2022, Joo and Steinert-Threlkeld 2022, Tarr, Hwang, and Imai 2023) and showing that the visuals of political video carry partisan signals that text alone misses (Ciccarone 2025). Aligning these observations word by word allows me to examine behavior accompanying references to particular parties as well as conduct across the speech as a whole.

Section 2 describes the institutional setting, Section 3 the corpus and the measures, and Section 4 the identification strategy. Section 5 presents the main result and its robustness, Section 6 sets out a framework for interpreting the decline and examines the margins on which its explanations differ, and Section 7 concludes.

2 Institutional Setting

2.1 The AfD's entry into the Bundestag

The AfD was founded in 2013 in opposition to the euro-area bailouts and moved toward the radical right over the following years, campaigning in 2017 above all on immigration (Arzheimer and Berning 2019). In that year it received 12.6 percent of the votes and entered the Bundestag as its third-largest parliamentary group (Der Bundeswahlleiter 2017), the first far-right party to win seats in a Bundestag election since 1949. Because the two largest parties then formed a coalition with one another, the AfD became the largest opposition group in the chamber, with the speaking time and the committee positions that this status carries. No other parliamentary group was willing to govern or cooperate with it, the line mainstream parties had largely settled on in the state parliaments (Heinze 2022). Mainstream legislators subsequently faced the AfD as a permanent participant in parliamentary work.

Two features of the German case make it well suited for the research question. The stigma attached to the far right is unusually explicit, and public engagement with it is strongly contested. The AfD's entry also provides a before-and-after comparison: before October 2017 no mainstream legislator worked alongside AfD members in the Bundestag; afterwards every committee included them. The seat-allocation rule generates differences in the share of AfD colleagues across committees.

2.2 Committees as the site of sustained contact

Most of the Bundestag's substantive legislative work takes place in permanent committees (Ismayr 2001, p. 167).[2] They prepare plenary decisions (Deutscher Bundestag 1980, § 62(1)), scrutinize government activity, and since each is assigned a specific policy area, they also allow their members to develop expertise within that domain (Ismayr 2001, pp. 170, 176; Mickler 2018). Membership is fairly stable within a term,[3] and the regular

[2] In the 19th Bundestag (2017–2021), the standing committees and their subcommittees met 2,960 times, against 239 plenary sittings. Apart from 609 public hearings, only 101 of these meetings were public (Deutscher Bundestag 2025, 2022).

[3] The committee assignments that define exposure in the data can be compared with the full memberships that abgeordnetenwatch.de (2026) lists for the end of the 19th term. Of the 269 legislators in the estimation sample, 260 appear in that list; most of the other nine left the Bundestag or moved into government posts during the term. Of the 260, 247 (95%) sat on exactly the same standing committees at the end

meetings, which are not public (Deutscher Bundestag 1980, § 69(1)), repeatedly bring together the politicians of all parliamentary groups that are represented on the committee.

This distinguishes committee membership from occasional encounters during plenary debate. Members negotiate procedural and substantive questions, observe how the other parties behave outside the public plenary sessions, and do so repeatedly over several years. Committees therefore provide sustained, institutionally sanctioned contact among members of similar formal status (Allport 1954). Status is equal in a formal sense: seats, and the chairs that come with them, are allocated to the AfD by the same proportional rules as to everyone else, even where its participation was contested elsewhere in the chamber.[4][5]

Speeches in plenary sessions—meetings of the full parliament—are public performances that simultaneously address the colleagues in the room and the audiences outside of it. Exposure occurs in committee, while outcomes are measured in public parliamentary debate, allowing me to study whether repeated committee interaction changes legislators' conduct outside those meetings.

2.3 The allocation rule

The Bundestag fixes each committee's total size at the beginning of a legislative period. Once that total is set, seats are distributed across parliamentary groups in proportion to their plenary strength using the Sainte-Laguë/Schepers procedure. Because a committee contains a finite and integer number of seats, proportionality cannot generally be implemented exactly. The rule converts national party strengths and a committee size into integer seat assignments, and small differences in committee size can move a committee across an allocation threshold and generate a discrete difference in the number—and therefore the share—of AfD representatives.

of the term as in the data, and 12 of the remaining 13 still sat on at least one of them. These figures cover the whole term, whereas the sample ends in March 2020.

[4]That contest was visible from the start of the term. The AfD's candidate for vice-president of the Bundestag failed in three rounds of voting in October 2017, and in November 2019 the legal affairs committee removed its AfD chairman, the first time a committee in the Bundestag had removed its own chair (Deutscher Bundestag 2019, Legal Tribune Online 2019). Neither touched committee membership, which follows the allocation rule of Section 2.3.

[5]Ismayr (2001, p. 193) describes committee debates as mostly collegial and relatively open, with far more willingness to engage with the other side's arguments than in plenary debates, and attributes this in part to the often long-standing cooperation of members in a small group.

Across the committees in the estimation sample the AfD's share of a legislator's committee colleagues ranges from 11.1 to 14.3 percent, a spread of 3.2 percentage points, and every magnitude I report is scaled to that range. Appendix Figure A2 traces the rule across committee sizes and shows where the realized committees sit on it.

I use this rule-induced variation through the committee-based design introduced by Esguerra et al. (2023). The design uses rule-induced differences in AfD seat shares, not random assignment of legislators to committees (Section 4). Esguerra et al. develop this source of variation to study whether right-wing populist rhetoric spreads to mainstream legislators. I use this variation to study whether sustained exposure changes mainstream politicians' public engagement with the AfD. Appendix B documents committee formation, the seat-allocation procedure, and the resulting identifying variation in detail.

3 Data and Multimodal Measurement

3.1 Recordings, transcripts, and the estimation sample

The analysis combines official Bundestag video recordings, which I assemble and align to the transcript word by word, with parliamentary metadata that build on Richter et al. (2020) and on the committee data assembled by Esguerra et al. (2023). Across the two terms, the corpus contains 18.1 million transcribed words, of which 13.8 million carry a usable head-pose measurement. It covers the 18th and 19th electoral terms and ends on 13 March 2020, the last day the Bundestag sat under its normal rules. When the chamber next met on 25 March, it did so under the reduced quorum adopted for the pandemic, while committee work moved to remote and hybrid formats.

The estimation sample contains 9,376 plenary speeches by 269 legislators of the CDU/CSU, SPD, Greens and Left. I exclude AfD and FDP speakers, since neither party is a mainstream incumbent exposed to the AfD's arrival: the AfD is the treatment, and the FDP was outside the Bundestag entirely during the 18th term. I retain speeches of at least 100 words, since the vocal and gesture measures are noisy on very short interventions, and speeches for which usable frontal footage of the speaker exists, since head orientation cannot be recovered otherwise.

I keep only legislators who sat on at least one of the same committees in both terms. This restriction matters for the design. A legislator who changed committees after 2017

could have chosen the new committees with the AfD's presence in mind and would then select into more or less exposure. Membership in the committees that stayers kept was chosen before the AfD entered the Bundestag. Baseline exposure nevertheless averages across all post-entry committees, including newly assigned memberships; the retained-committee alternative isolates exposure through the continuing relationships. The same definition separates stayers from changers in Esguerra et al. (2023). It reduces the eligible sample from 440 legislators to 270 before the remaining coverage restrictions and leaves 269 in the estimation sample. These legislators have more stable, and on average more senior and specialized, parliamentary careers than the chamber as a whole. Appendix Table A1 gives the full sample progression; Section 5.2 reports estimates without the committee-stability restriction and separately for stayers and changers.

3.2 Measurement architecture

From each video recording, I recover the words spoken, visible behavior, and vocal delivery. Transcripts identify explicit references to a party; the images show head orientation and gesture; the sound supplies pitch and loudness. Aligning these observations allows me to examine the behavior accompanying a reference as well as behavior across the speech as a whole. Audio is transcribed and force-aligned to the recording at the level of the individual word. Video frames are processed to identify the speaker and characterize head orientation and visible gestures. The audio track is separately processed to measure properties of vocal delivery. The three streams are synchronized on common timestamps and then aggregated to the speech.

Visual measurements are taken from one frame per aligned word. Their aggregation therefore weights words equally rather than elapsed speaking time: shares of these sampled frames are also word shares when they use the same eligible observations. Orientation is aggregated from word-level episode assignments, while gesture uses words with a usable classification. Speech- and sentence-level acoustic features are computed from the corresponding complete audio clips (Section L.2).

3.3 Measuring engagement and delivery

Engagement. The measure combines explicit acknowledgment with visible attention, including orientation toward the party when it is not named. I average the two standard-

ized components with equal weights (Kling, Liebman, and Katz 2007), then standardize the resulting measure so that effects are expressed in standard deviations of engagement. All standardization uses the estimation sample pooled across both terms. Both components are observed for every speech in that sample.

Verbal engagement. The verbal component of engagement indicates whether a speech explicitly names the AfD. Transcripts also supply the timing needed to align verbal references with visual and acoustic behavior. Matching whole tokens is not enough in German, where *AfD-Fraktion* and *AfD-Antrag* are single words: I therefore match *AfD* wherever it begins a token or follows a non-letter, which captures the compounds while excluding the few ordinary words in which the letters happen to occur across a morpheme boundary. References that do not explicitly name the party, such as *die Blauen* ("the Blues"), *die Fraktion rechts außen* ("the parliamentary group on the far right"), or a member by name alone, do not enter this indicator. Identifying implicit references to the party would require hand-labelling.

I also identify references to individual AfD members for supplementary analyses. Person-to-party attribution is retained only where the detected name is preceded by an address marker such as *Herr* or *Frau*, which removes surname collisions with common German words.

Visual attention. I measure visible head orientation using face detection and head-pose estimation on frames classified as showing the speaker at the lectern. Because all speakers address the chamber from the same lectern, head orientation maps consistently to seating sectors. I focus on the two outer flanks, occupied in the 19th Bundestag by the AfD and the Left. The angular sector corresponding to the AfD's benches follows Arnold and Küpfer (2024), who establish head orientation as a measure of directed attention in this chamber; I build my own word-level pipeline on the same principle. These sectors are identifiable at the available angular resolution, and facing either requires speakers to turn away from the lectern's forward orientation. The parties seated between them cannot be reliably distinguished. The visual component of engagement is the share of aligned words assigned to sustained episodes of orientation toward the AfD flank. Section K.2 validates it: naming a party moves a speaker's head toward that party's benches, and does so for the AfD only once the AfD occupies them. The sector opens where the AfD's front benches come into view and also contains the outer benches of the FDP, which

returned to the Bundestag in the same election; Section 5.2 returns to this. Section K.1 documents the seating geometry, angular thresholds, episode definition, and alternative sector boundaries used for robustness checks.

Head orientation identifies a turn toward a seating sector, but cannot establish eye contact or distinguish addressing its occupants from looking past them.

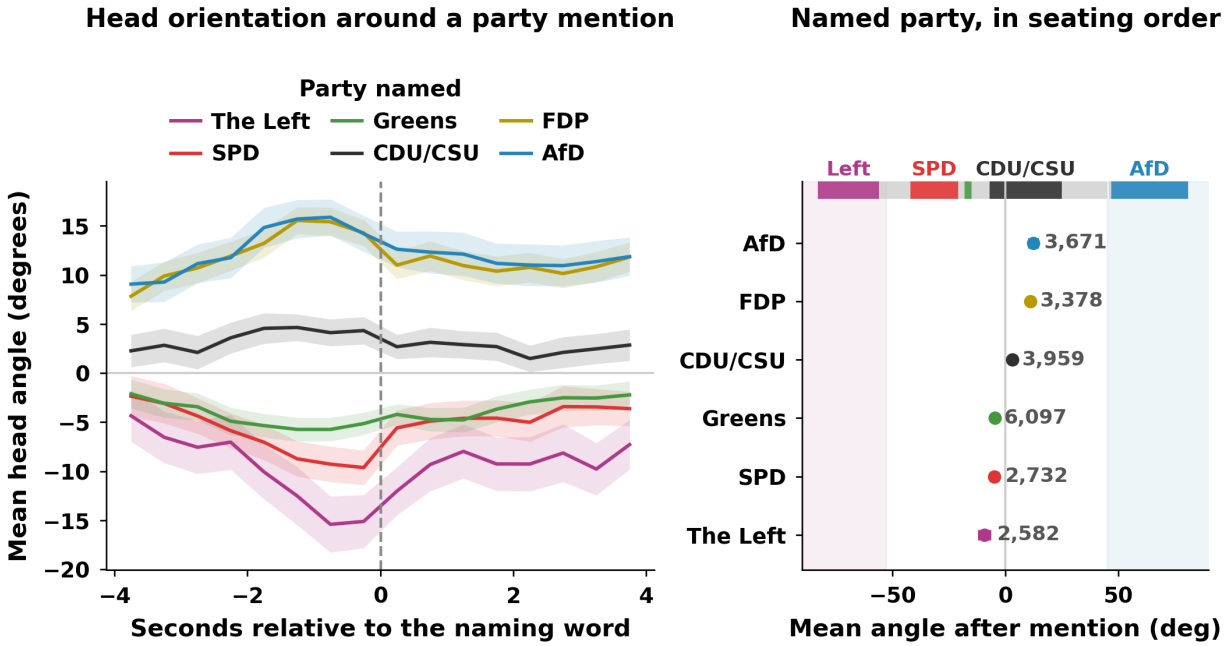
Whether head orientation tracks *whom* a speaker addresses can be checked directly, because the transcript and the video are aligned word by word. Figure 2 takes every word in the 19th Bundestag that names a parliamentary group other than the speaker's own and follows the speaker's horizontal head angle in the four seconds around it. If the measure captures addressing, naming the Left should turn the head left, naming the AfD should turn it right, and the parties in between should fall in between. They do, in exact seating order: the mean angle just after the mention is $-9.3°$ for the Left, $-4.9°$ for the SPD, $-4.6°$ for the Greens, $+3.1°$ for the CDU/CSU, $+11.1°$ for the FDP and $+12.4°$ for the AfD, each averaged over several hundred speakers. The turn also begins about a second *before* the party is named: speakers orient toward the group they are about to address and then name it. The mean angles remain well inside the sector boundaries because speakers do not maintain the turn throughout the sentence.

Delivery. Three further outcomes describe how a speech is delivered. Gesture is the share of classified word-level frames in which the speaker's hands are raised, classified frame by frame by a ResNet-50 (He et al. 2016). Vocal delivery is within-speech variation in pitch and in loudness, computed from the eGeMAPSv02 functional set (Eyben et al. 2016) on the complete audio trace; because each speech is compared with itself, both are robust to differences in recording conditions. Appendix L documents their construction, validation and measurement error. Figure 3 shows how explicit references, head orientation, gesture, and vocal delivery align within a single speech.

3.4 Measure limitations

All of these measures describe observable behavior. I do not read head orientation as attention in a psychological sense, or gesture and voice as emotions. Where a result depends on how a measure is operationalized, I report the alternatives; Section 5.2 reports all four operationalizations of directional attention. For the models I trained myself, I

FIGURE 2: SPEAKERS TURN TOWARD THE PARTY THEY NAME



Notes: 19th Bundestag, speeches with observed head pose; words naming a parliamentary group other than the speaker's own. Left: mean horizontal head angle in half-second bins around the naming word, by the party named. Right: mean angle in the 1.5 seconds after the mention, parties in seating order from left to right. Positive angles are to the speaker's right. Speaker-weighted means with 95 percent intervals. Shaded: the Left ($\leq -53°$) and AfD ($\geq +45°$) sectors. The strip along the top shows the approximate seating from Appendix Figure A3, for orientation only.

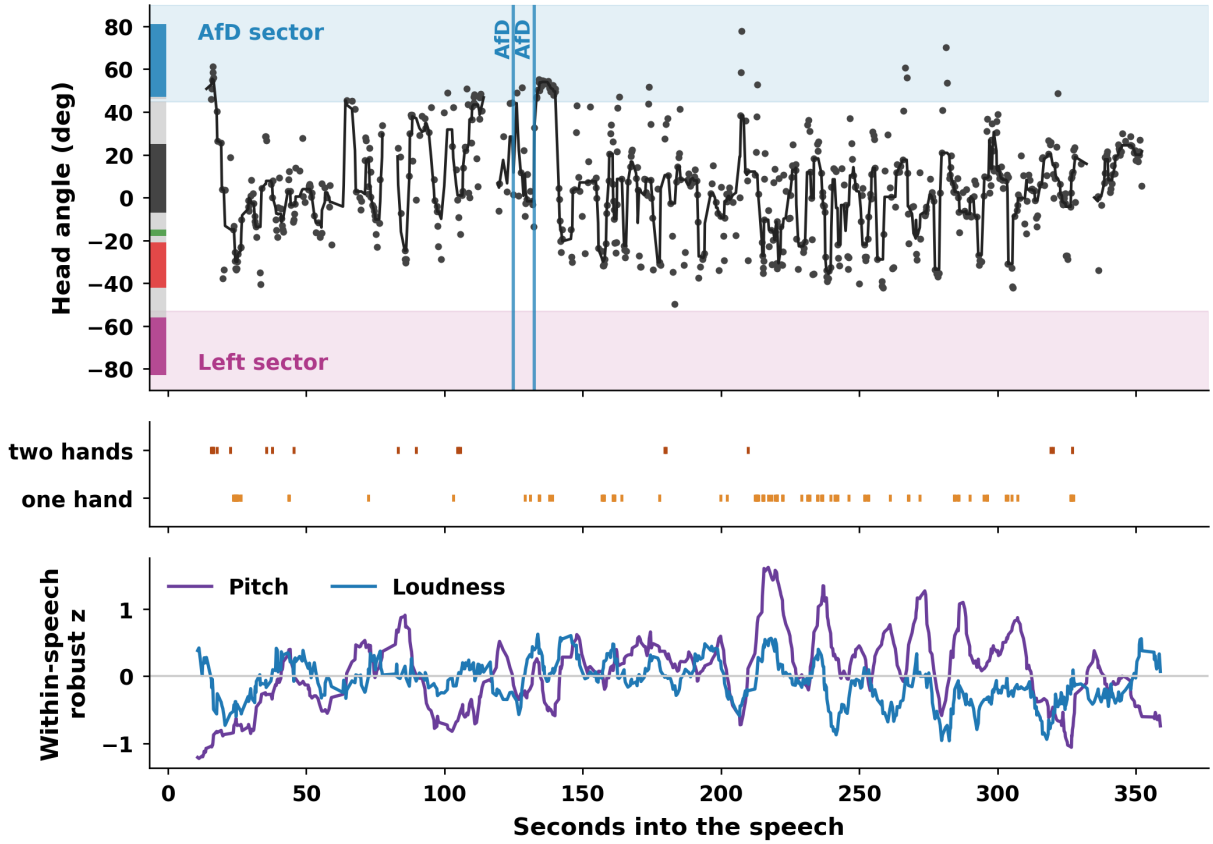
report held-out performance on labeled parliamentary material; for off-the-shelf components, I report the developers' published benchmarks and add in-domain checks (Part II).

4 Empirical Strategy

4.1 Rule-induced exposure

The treatment is a legislator's average exposure to the AfD across the committees they sit on in the 19th Bundestag. The identifying variation is the one shown in Appendix Figure A2: given the AfD's national strength, the share of a committee that is AfD is a step function of that committee's size, and committee sizes are set for reasons of portfolio scope and workload. Averaging over a legislator's committees smooths that step function without removing the variation it generates, since a legislator's portfolio is not chosen

FIGURE 3: ANATOMY OF A SPEECH



Notes: One speech by an SPD legislator (12 September 2018, 733 words), shown to make the four measures concrete on a single case. Top: word-level horizontal head angle; vertical lines mark words naming a party, coloured by the party named. Middle: frames classified as showing a one- or two-hand gesture. Bottom: within-speech robust z-scores of word-level pitch and loudness, rolling means.

with the allocation arithmetic in view.

Legislators are not randomly assigned to committees. Retaining at least one committee preserves a continuing committee relationship, but does not hold the full portfolio fixed. Identification requires that differences in rule-induced AfD representation across legislators' portfolios are unrelated to how their conduct would otherwise have changed. The baseline averages over all post-entry committees, including newly assigned memberships; exposure built only from retained committees addresses this additional source of selection (Section C.4). Section 4.3 states the assumption and the checks available in the data.

Throughout, I scale the treatment so that the coefficient describes a move from the least- to the most-exposed portfolio in the sample. Exposure ranges from 0.111 to 0.143,

so this is a 3.2-percentage-point contrast. I also report effects per standard deviation of exposure.

4.2 Specification

The baseline compares changes in conduct across legislators with different rule-induced exposure:

$$Y_{ist} = \beta \left(\text{Exposure}_i \times \text{Post}_t \right) + \alpha_i + \lambda_t + \varepsilon_{ist}, \tag{1}$$

where Y_{ist} is engagement for speech s by legislator i in quarter t, α_i is a legislator fixed effect and λ_t a calendar-quarter fixed effect. Because Exposure_i is time-invariant and Post_t is common, both are absorbed and β is identified from the differential change of more- and less-exposed legislators. Standard errors are clustered on the legislator in the baseline; alternatives are discussed in Section 5.2.

Legislator fixed effects mean the comparison is within an individual politician. A legislator's baseline speaking style, their tendency to gesture, the pitch of their voice and their habitual stance at the lectern are all differenced out, which matters for measures like these where between-person variation is large and largely irrelevant. Quarter fixed effects absorb anything common to the chamber at a point in time, including changes in camera conventions and the recording setup.

4.3 Identifying assumption and evidence

The interpretation of β requires that, absent differential committee exposure, the conduct of more- and less-exposed legislators would have evolved similarly. I assess this assumption along five dimensions.

Who sits where. Committee assignment is not random. Appendix Table A2 regresses predetermined legislator characteristics on exposure at the legislator level. None of the six characteristics in columns 1–6 is individually significant at the ten percent level, but jointly they predict exposure ($F(6, 92) = 4.08$, $p = 0.0011$). More- and less-exposed legislators therefore differ in composition. Because these characteristics are fixed over the sample period, the legislator fixed effects absorb their levels. They do not absorb differential trends, since a characteristic that never changes can still predict a different change after 2017. Section C.4 therefore interacts each of them with the post period and adds

party-by-quarter and East-by-quarter fixed effects, which leaves the engagement estimate at -0.41 with a smaller standard error than the baseline (0.148 against 0.167).

Pre-trends. Figure 5 reports estimates of engagement in six-month windows around the AfD's entry, referenced to the last window before entry. Appendix Figure A4 reports the same half-year estimates for each facet and Appendix Figure A5 for the delivery measures, each with its joint pre-entry test in the note.

A rule placebo. The same allocation rule generates rule-induced variation in *every* party's committee share. If the estimates picked up the rule rather than the AfD, the FDP—which returned to the Bundestag in the same election after four years outside it, and which no one describes as a stigmatized outgroup—should reproduce the pattern. Appendix Table A3 reports that specification.

Committee size and topics. With a single committee, a legislator's exposure is constant within the committee, so the comparison is ultimately between committees. Committee size and what a committee's members debate could both change differently after 2017; members of the interior committee, for instance, spoke about migration far more once the AfD had entered. Appendix Table A4 controls for committee size and for the topics of each speech, both interacted with the post period.

Selection into observation. Exposure could change who speaks, how often, and which speeches survive the frontal-footage and coverage filters, in which case the speech-level estimates would partly reflect a change in the composition of speeches. Section E.1 reports how exposure relates to speaking, and Appendix E examines selection associated with the multimodal filters and bounds the engagement estimate and its two facets for selection into speaking.

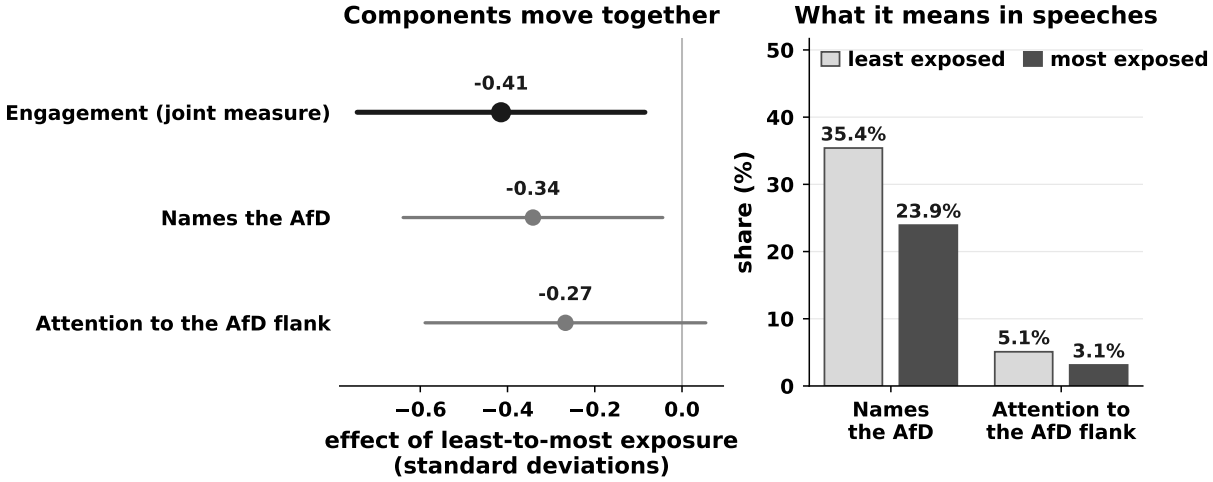
5 Results

5.1 Sustained exposure

Figure 4 reports the effect of sustained committee exposure on engagement with the AfD.[6]

[6]Exposure moves the two facets jointly: $F(2, 268) = 3.23$, $p = 0.041$, from a regression that stacks the two standardized facets with facet-specific legislator and quarter fixed effects, clustered on the legislator. Appendix Table A5 reports each facet separately, and Section C.4 how differently they hold up.

FIGURE 4: SUSTAINED COMMITTEE EXPOSURE AND ENGAGEMENT WITH THE AFD



Notes: The effect of moving from the least- to the most-exposed committee portfolio, a 3.2 percentage point change in the AfD share of a legislator's committee colleagues. Left: the engagement and the two standardized facets it averages, in outcome standard deviations, with 95 percent confidence intervals from standard errors clustered on the legislator. Right: the same effect for each channel in its own units, as predicted shares at the least- and most-exposed portfolio. All estimates include legislator and calendar-quarter fixed effects. Appendix Table A5 reports the coefficients and standard errors.

Greater exposure reduces engagement with the AfD. Moving from the least- to the most-exposed portfolio lowers engagement by 0.41 standard deviations ($p = 0.014$), and both facets move with it: the probability that a speech names the AfD falls by 11.5 percentage points, or 0.34 outcome standard deviations. After the AfD's entry, 29 percent of the speeches in the sample name the party, so the effect corresponds to about 40 percent of the post-entry mean. Exposure also lowers the share of aligned words assigned to sustained orientation toward the AfD flank by 2.0 percentage points, or 0.27 standard deviations. These are full-range contrasts: the observed range of exposure spans 3.2 percentage points, or 4.8 standard deviations of exposure, and a one-standard-deviation increase corresponds to -0.071 standard deviations on naming and -0.056 on visual attention.

AfD exposure also reduces references to the FDP, which returned to parliament in the same election, while references to the four groups represented in both terms show no comparable decline (Section C.5). This target comparison differs from the FDP-exposure placebo: it asks which parties receive less attention, rather than which colleagues generate the response.

The engagement measure captures public attention through both explicit references and visible orientation, including periods when the party is not named. The estimates

suggest that the decline extends beyond fewer references to how speakers orient themselves toward the AfD benches, although the orientation evidence is less robust than the naming result (Section 5.2).

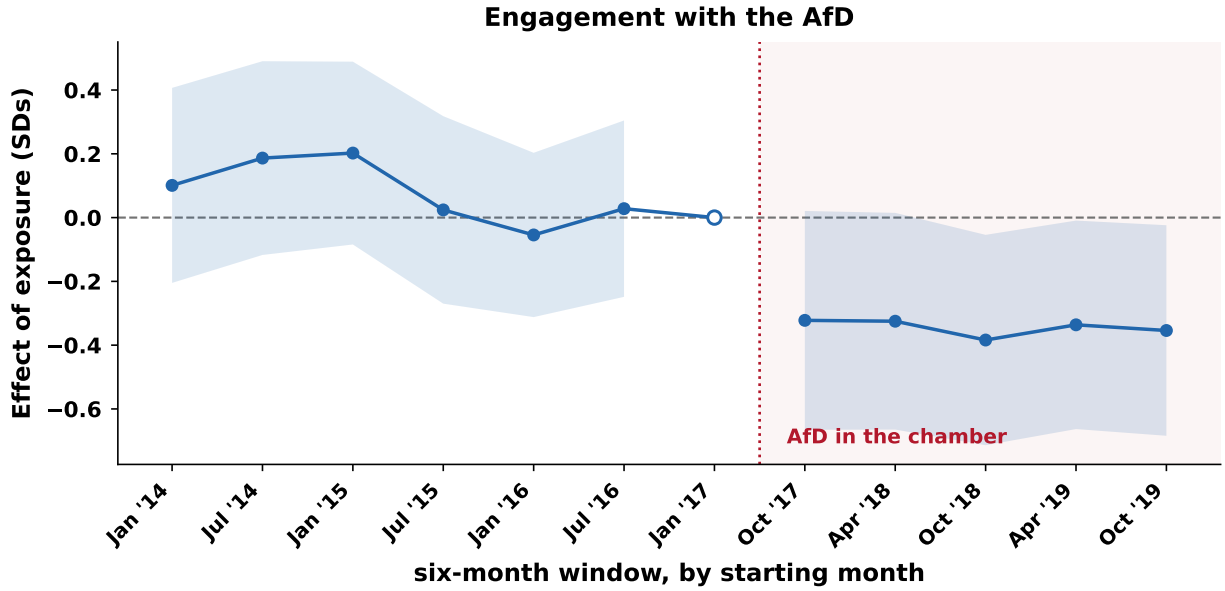
A legislator's committees average 39 members, so one seat is 2.6 percentage points of the AfD share and the full-range contrast of 3.2 points is about one and a quarter additional AfD members. Holding committee size fixed the full-range effect is 10.6 points rather than 11.5, which rescales to 8.5 points for a one-seat change on a committee of 39. This interpretation is a linear rescaling of the committee-size-controlled estimate for a committee of 39 members. The contrast concerns exposure intensity among legislators who retained at least one committee across terms, with AfD colleagues as recurring counterparts in closed sessions. Every legislator in the sample already works with AfD colleagues, whose shares range from 11.1 to 14.3 percent. The estimate applies within this narrow range, on committees with about five AfD members, and should not be extrapolated to the arrival of a first AfD colleague.

Figure 5 dates the change. It follows the exposure estimate in six-month windows around the AfD's entry, with the last window before entry as the reference. I detect no differential pre-entry trend: the six earlier windows run from -0.054 to $+0.202$, none is individually distinguishable from zero, and a joint test does not reject that they are all zero ($F(6, 268) = 1.01$, $p = 0.42$). More-exposed legislators fall behind once the AfD is in the chamber and stay behind for the rest of the term, at between -0.32 and -0.38 standard deviations in every post-entry window. Engagement itself rises for everyone after entry, since the AfD was not there to be named before; what the figure traces is the gap between more- and less-exposed legislators, not the level.

Two checks that do not depend on how the windows are cut agree. Estimated by calendar quarter instead, the joint test does not reject zero pre-entry leads for engagement ($p = 0.71$) and for each facet ($p = 0.50$ for naming and 0.71 for attention; Appendix Table A6). And on the pre-entry sample alone, exposure interacted with a linear time trend, with an indicator for the second half of the pre-entry period, and with an indicator for the final year before entry gives $+0.010$ ($p = 0.73$), -0.001 ($p = 0.96$) and -0.012 ($p = 0.91$); the same three tests are null for each facet separately.

The result is robust to controls for committee size and for what legislators talk about. Appendix Table A4 adds committee size interacted with the post period, linearly, quadratically and in terciles, as well as the topic shares of each speech and their interaction with the post period. The engagement coefficient stays between -0.36 and -0.42

FIGURE 5: ENGAGEMENT WITH THE AFD, BY HALF-YEAR RELATIVE TO ITS ENTRY



Notes: Committee AfD exposure interacted with indicators for six-month windows, labeled by the month each window begins. The AfD took its seats on 24 October 2017, during a four-month parliamentary gap: the 18th Bundestag last sat on 30 June 2017. Windows before entry are therefore measured back from that sitting and windows after it forward from entry, so that each holds a full six months of sitting calendar; the break in the series is the gap itself. Measured back from the entry date instead, the last pre-entry window would hold only two months of sittings and a single calendar quarter, which the calendar-quarter fixed effects absorb almost entirely. The last window before entry, 30 December 2016 to 30 June 2017, is the omitted reference and is drawn as a hollow marker. Shading marks the windows in which the AfD sits in the chamber. The outcome is engagement, the joint measure of naming and visual attention. Bands are 95 percent confidence intervals from standard errors clustered on the legislator. Dropping the 145 speeches given between entry and the twenty-three standing committees' constituent meetings on 31 January 2018, before any legislator had committee exposure, leaves the engagement estimate at -0.441 ($p = 0.008$).

standard deviations across these specifications and remains significant at the 10 percent level in all of them; the naming coefficient stays between -0.27 and -0.34.

5.2 Identification, robustness, and inference

Replacing AfD exposure with exposure to the FDP, which returned to the Bundestag in the same election and is allocated by the same rule, gives an engagement coefficient of $+0.17$ (s.e. 0.22), with the opposite sign and indistinguishable from zero, and neither facet declines (Appendix Table A3).

The engagement estimate stays between -0.40 and -0.43 when I vary time fixed effects, speech-length restrictions, outcome availability and weighting (Appendix Tables A7

and A8), and between -0.36 and -0.42 when I control for committee size and speech topics (Appendix Table A4). Measured as the number of AfD colleagues rather than their share, exposure lowers engagement by 0.10 standard deviations per additional AfD member (Appendix Table A9). Alternative definitions of visual attention yield similar estimates (Appendix Tables A10 and A11). Rebuilding the engagement index with observed-pose denominators leaves its estimate between -0.400 and -0.406, against -0.415 in the baseline (Appendix Table K1); the engagement estimate is stable across these denominator choices despite lower pose coverage under greater exposure. The attention sector also contains the FDP's outer benches, and the FDP returned to the Bundestag in the same election as the AfD entered it; FDP exposure does not reproduce the orientation result. The seating geometry and the orientation around party mentions help assess which group speakers address (Section K.2).

The estimation sample is restricted to legislators who kept at least one committee across the two terms. The restriction protects the design against selection into exposure: a legislator who changed committees after 2017 could have chosen the new committees with the AfD's presence in mind, whereas the committees that stayers retained were chosen before the AfD entered. Admitting legislators who changed all committees raises the sample from 269 to 440 legislators and lowers the engagement estimate from -0.41 to -0.33 without changing its sign (Appendix Table A12); for changers alone, engagement is $+0.14$ and imprecise, and the difference from the stayers is not significant ($p = 0.30$). The main estimates concern legislators who kept at least one committee across the two terms, conditional on taking the floor. Their exposure is not wholly predetermined: the baseline averages over all of their post-entry committees, including any assigned once the AfD's seat counts were known. Section C.4 reports the variant built from retained committees alone.

Inference is complicated by overlapping committee portfolios. The 269 legislators hold 127 distinct portfolios, but those portfolios are assembled from roughly two dozen standing committees and are therefore not independent. Appendix Table A13 sets three alternatives beside the baseline: clustering on committee portfolio $\times$ period cells; a wild cluster bootstrap on the legislator; and randomization inference that redraws the twenty-five committee sizes, reapplies the allocation rule, and reconstructs each legislator's exposure. Engagement holds up under all four ($p = 0.014$ clustered on the legislator, 0.006 on portfolio-by-period cells, 0.017 bootstrapped, 0.044 under redrawn sizes). Among the facets, naming the AfD is the more consistently supported (0.025 clustered on the legis-

lator, 0.017 on portfolio-by-period cells, 0.023 bootstrapped, 0.095 under redrawn sizes); visual attention follows (0.103, 0.066, 0.106, 0.136). With 269 clusters the bootstrap stays close to the asymptotic approximation, so what separates the procedures is the randomization test, which draws its counterfactuals from the allocation rule and is the most demanding of the four on both AfD-directed outcomes. Section C.4 reports these estimates recentred by expected exposure following Borusyak and Hull (2023), together with leave-one-committee-out and retained-committee variants. Recentring moves the engagement estimate from -0.41 to -0.36, a reduction of 13 percent. Because recentring changes the regressor rather than the variance estimator, its randomization test is a test of the recentred coefficient; I report the baseline as the paper's estimate and the recentred specification as a design-based robustness analysis. The leave-one-committee-out and retained-committee checks bear directly on how far the two facets travel together. Dropping each standing committee in turn leaves engagement significant at the 10 percent level in all 25 estimates (23 at 5 percent) and naming in 24, but attention in only 7 (Appendix Table A14). And building exposure only from the committees a legislator held in both terms—which excludes any committee assigned after the AfD's seat counts were known, and is therefore the cleaner treatment—leaves engagement at -0.27 (s.e. 0.16) and naming at -0.30 ($p = 0.045$), while attention falls to -0.10 and is indistinguishable from zero. The verbal facet carries the result under these variants; the visual one does not.

Engagement is the single confirmatory outcome; multiplicity adjustments apply to the supplementary outcome families. Its two facets form the family of engagement facets; within it, Holm adjustment gives $p = 0.049$ for naming and $p = 0.103$ for attention (Appendix Table A15).

6 Interpreting the Decline

To interpret the decline in engagement, I examine which references disappear, how the remaining references are delivered, and how legislators respond immediately after an AfD speech. This brings the wording, voice, and visible orientation accompanying engagement into the comparison between strategic avoidance and habituation. A stylized model sets out the predictions and the assumptions needed to interpret these comparisons.

Whether to engage a far-right party is a choice rather than a default, and it has costs on both sides. Contesting the party keeps its claims from standing unanswered on the

record and in the press, and a legislator who never engages concedes the framing of the issues it raises. Contesting it also raises the salience of the issues the party owns (Meguid 2005) and can lend the party attention and standing. Exclusion, where it has been tried, has been costly and contested (Downs 2001, van Spanje and van der Brug 2007), and in German state parliaments before 2017 some established parties first cooperated with the AfD and became more reluctant as they learned how it operated (Heinze 2022). Contact does not settle the choice in advance. Among strategic actors who share an institution, committee work could make engagement more cooperative or less, and exposure to an outgroup outside the laboratory has been found to increase hostility rather than reduce it (Dinas et al. 2019).

If engagement falls with exposure, two explanations are available. The first is strategic. Committee work may change what legislators expect engaging the AfD to achieve—whether arguments lead to compromise, whether cooperation is reciprocated, whether AfD members use the meetings mainly for an audience outside the room—and concern about an audience's inferences can make visible engagement costly if it may be read as legitimizing the party (Morris 2001, Ely and Välimäki 2003, Ely, Fudenberg, and Levine 2008). A legislator who concludes that engagement does not pay withholds it where it can be controlled and where it reaches an audience, and because channels differ in how easily they are controlled, they need not move together (Holmström and Milgrom 1991, Bénabou and Tirole 2006). I call this strategic avoidance. The second is habituation: regular interaction with AfD members may weaken an individual legislator's response to them, much as entering parliament makes a radical-right party more acceptable to voters (Valentim 2021), and the response it provokes weakens with repetition, which is what habituation describes (Rankin et al. 2009). The first changes what legislators choose; the second changes how strongly the AfD provokes them. Both predict less engagement, they can operate together, and the design identifies behavior rather than the beliefs behind it. The model below formalizes the distinction and sets out the assumptions behind these comparisons.

6.1 A legislator's problem

A stylized, unestimated model links the two explanations to the empirical comparisons.

A legislator i chooses conduct $\mathbf{a}$ across the channels I measure—naming the AfD, turn-

ing toward its benches, and how a speech is delivered—to solve

$$\max_{\mathbf{a}} \; q_i \, G(\mathbf{a}) \; + \; \rho_i \, V(\mathbf{a}) \; - \; C(\mathbf{a}). \tag{2}$$

Here $G(\mathbf{a})$ measures the substantive engagement that conduct $\mathbf{a}$ delivers in the chamber, and q_i is the return legislator i expects per unit of that engagement. $V(\mathbf{a})$ captures the audience value of being seen to confront the AfD, weighted by how much that audience matters to the legislator, ρ_i, while $C(\mathbf{a})$ is the cost of controlling the different channels of conduct. Let $\mathbf{a}_i^*$ solve (2), with a_{ik}^* its component in channel k. Observed conduct in channel k combines the legislator's chosen behavior with a response provoked by the situation and measurement error,

$$y_{ik} \;=\; \underbrace{a_{ik}^*}_{\text{chosen}} \; + \; \underbrace{n_k(s, E_i)}_{\text{provoked}} + \varepsilon_{ik}, \tag{3}$$

where s is the parliamentary situation, for instance an AfD member having just spoken, and E_i is committee exposure. Exposure therefore moves measured conduct through two routes,

$$\frac{\partial y_{ik}}{\partial E_i} \;=\; \frac{\partial a_{ik}^*}{\partial q_i} \, \frac{\partial q_i}{\partial E_i} \; + \; \frac{\partial n_k}{\partial E_i},$$

the first through the choice in (2), the second through what the situation provokes. Four implications organize what follows.

Strategic avoidance moves chosen conduct. If committee work lowers what a legislator expects engaging the AfD to achieve, exposure lowers q_i and with it a^*. How much a channel responds depends on how costly it is to control: most where conduct is easy to steer, such as whether to name the party, and least where it is not, such as the pitch of a sentence. Section 6.2 asks which mentions disappear.

Habituation moves what the situation provokes. Because habituation is not a choice, it acts through n_k rather than through a^*: under habituation $\partial n_k / \partial E_i < 0$, under strategic avoidance $\partial n_k / \partial E_i = 0$. Learning that engaging the AfD does not pay is different: it changes beliefs, moves q_i, and belongs to the strategic explanation. The two explanations can operate together, and they differ on the margins that carry n_k: the delivery of the mentions that remain and the reaction when an AfD member has just spoken (Section 6.2).

Both comparisons rest on assumptions stated in Table 1.

The audience separates the channels. V weights conduct by how far it travels: a quotable attack enters the record and the press, a turn of the head mainly the broadcast. Incumbents have an incentive to posture in floor speech for the voters who observe it (Ash, Morelli, and Van Weelden 2017), and a legislator facing a close race against the AfD values being seen to confront it more. A higher ρ_i should therefore move naming more than attention. It is also where an individual legislator's incentives can depart from the party's. I therefore use the combined engagement measure to study committee exposure and examine its components separately when studying electoral incentives (Section 6.4).

Taking the floor is a selection margin. I observe y_{ik} only when the legislator speaks, and the parliamentary groups allocate speaking slots (Proksch and Slapin 2012, 2015), so I do not read how often a legislator speaks as their response to exposure. It matters because every estimate is conditional on a speech. Exposure is associated with fewer speeches; giving every legislator equal weight leaves the engagement estimate unchanged, and Appendix E reports bounds. The same applies to the choice of debate: an agenda-item fixed effect conditions on a variable exposure helps determine, so I report estimates with and without it.

The model does not say which part of the return moved: engagement may have come to achieve less, to confer more standing on the AfD, or to cost more reputationally, and the design does not separate these. Convergence in delivery lies outside the model, because it concerns how legislators speak rather than how much they engage: legislators who regularly hear AfD members speak may adopt parts of their way of speaking, as more-exposed mainstream legislators come to resemble it in their rhetoric (Esguerra et al. 2023). Section 6.3 tests this.

6.2 Avoidance or habituation?

Both explanations in Section 6 predict fewer negatively worded mentions. They suggest different patterns in how the remaining engagement is delivered and in how legislators react when the AfD has just spoken, under the assumptions in Table 1.

TABLE 1: PREDICTIONS UNDER STRATEGIC AVOIDANCE AND HABITUATION

	Strategic avoidance	Habituation
A. Margins that cannot separate the two explanations		
Naming the AfD, attacks in particular	↓ Falls	↓ Falls
Attention toward the AfD benches	↓ Falls	↓ Falls
B. Potentially informative margins, under the assumptions in the note		
Voice when naming the AfD	→ Not calmer	↓ Calmer
Reaction right after an AfD speech	→ Unchanged	↓ Weaker with exposure

Notes: Arrows give the predicted direction of the change as committee exposure rises: ↓ a decline, → no decline. The two margins in Panel B separate the explanations only under assumptions the paper cannot test. Voice is observed on the mentions that survive, and exposure selects those: if naming the party at all requires clearing a threshold of provocation, the occasions that clear it under habituation are the more provocative ones and carry higher pitch too. The immediate reaction is assigned to the situation rather than to the speaker's choice, although a reply to an AfD speech may itself be chosen, and the estimate is imprecise enough to be consistent with substantial attenuation (Section 6.2).

Which mentions disappear. I score every sentence that names the AfD with the German political sentiment dictionary of Rauh (2018) and classify it as negative if it contains more negative than positive terms. Table 2 splits the naming outcome accordingly. Mentions in negative sentences fall by 7.0 percentage points against a post-entry mean of 11.0 percent. Mentions that occur only in other sentences fall by 4.5 percentage points against a mean of 18.0 percent, and this estimate is not significant. Naming individual AfD members does not change with exposure. The larger decline occurs in negatively worded mentions, consistent with reduced confrontation. Sentence-level negativity remains a proxy: it does not establish that criticism is directed at the AfD. The electoral heterogeneity provides a further comparison: closer competition attenuates the decline in naming toward zero while the estimated response in visible orientation remains negative (Section 6.4), so the withdrawal is selective across channels rather than uniform.

How the remaining mentions are delivered. Absent changes in which references remain, habituation would suggest calmer delivery; selection into naming limits this comparison. Table 3 compares, among post-entry speeches that name the AfD, the sentence that names it with the rest of the same speech. Because exposure is time-invariant in the post-entry-only specification, this comparison cannot use legislator fixed effects. It

TABLE 2: WHICH MENTIONS DISAPPEAR?

	Names	Names the AfD in a sentence that is		Names the AfD or	Names an AfD
	the AfD	negative	not negative	a member	member
	(1)	(2)	(3)	(4)	(5)
A. Sustained exposure					
AfD exposure × Post	-0.115**	-0.070**	-0.045	-0.090	-0.018
	(0.051)	(0.034)	(0.036)	(0.060)	(0.049)
Post-entry mean	0.289	0.110	0.180	0.356	0.177
Speeches	9,376	9,376	9,376	9,376	9,376
B. Immediate salience					
AfD spoke immediately before	-0.043**	0.017	-0.060***	0.036	0.058***
	(0.021)	(0.017)	(0.016)	(0.022)	(0.020)
Post-entry mean	0.287	0.109	0.178	0.354	0.177
Speeches	3,693	3,693	3,693	3,693	3,693

Notes: Outcomes in native units (shares of speeches). Column 1 is the naming outcome of Appendix Table A5; columns 2 and 3 split it by whether at least one sentence naming the AfD is negative in the Rauh (2018) dictionary, so they add up to column 1. Column 4 counts speeches that name the party or address one of its members by name; column 5 counts the latter only. Panel A: specification of Appendix Table A5, clustered on the legislator. Panel B: specification of panel B of Table 4, clustered on the sitting. Both mean rows are post-entry means. Panel B's sample is the post-entry speeches with an identified preceding speaker, almost all post-entry speeches of the estimation sample, so the two rows nearly coincide. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

compares legislators within party and quarter and controls for each legislator's pitch and loudness variation before 2017, so it does not identify a within-legislator effect. The wording of the remaining mentions is somewhat less negative in more-exposed legislators' speeches. Their voice is not calmer. Relative to the rest of the speech, the sentence naming the AfD is spoken higher in pitch (0.40 standard deviations, $p = 0.03$) and louder (0.46 standard deviations, $p = 0.03$) than among less-exposed legislators. Gesture does not differ.

Estimating the immediate response. The main specification uses the committee design to estimate the effect of sustained exposure through months of shared committee work generated by the allocation rule. The parliamentary setting also permits a comparison based on whether an AfD member held the floor in the immediately preceding speech, making the party salient. I estimate this comparison within the post-entry period from the order of speakers in a sitting, excluding speeches without an identified predecessor,

TABLE 3: HOW THE REMAINING MENTIONS ARE DELIVERED

	Wording		Sentence naming the AfD			Mention word	
	Negative	Tone	Pitch	Loudness	Gesture	Pitch	Loudness
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
AfD exposure	-0.240	0.409**	0.400**	0.458**	-0.061	0.230	-0.112
	(0.195)	(0.187)	(0.181)	(0.213)	(0.159)	(0.204)	(0.168)
Party FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Speeches	1,009	748	1,009	1,009	1,009	844	871

Notes: Post-entry speeches in the estimation sample that name the AfD. Coefficients on committee AfD exposure (least to most) in standard deviations of each outcome. Negative: at least one sentence naming the AfD is negative. Tone: mean of $(\text{pos} - \text{neg})/(\text{pos} + \text{neg})$ over the sentences naming the AfD. Pitch: semitones in the sentence (or word) naming the AfD relative to the rest of the same speech. Loudness and gesture: the same differences in loudness and in the share of frames with a gesture. All regressions include party and quarter fixed effects and the legislator's pre-entry pitch and loudness variation. The columns differ in how many speeches they can use. The tone score is defined only where a sentence naming the AfD contains a term in the dictionary, which holds for about half of the speeches with a single naming sentence and for more than nine in ten of those with three or more. The two mention-word columns measure pitch and loudness on the naming word rather than on the whole sentence, and a single word more often carries no usable estimate; pitch requires voicing and so drops out more often than loudness. Standard errors in parentheses. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

with legislator and quarter fixed effects and standard errors clustered on the sitting.

This comparison examines whether immediate salience changes the measured responses and whether those responses vary with sustained exposure.

How legislators react when the AfD has just spoken. Table 4 and Fig. 6 compare the effect of sustained exposure with the response to an AfD speech that immediately precedes a legislator's own. Speaking order is not randomly assigned, so the second comparison does not have the same causal status as the first. It shows first that the attention measure responds to the AfD in the expected way: when an AfD member has just held the floor, attention toward the AfD flank rises by 0.13 standard deviations ($p < 0.01$), even though legislators with greater sustained exposure turn toward it less overall. Naming the party falls after an AfD speech, but naming AfD members rises by 5.8 percentage points (Table 2, panel B). Legislators who reply to an AfD speaker address the speaker by name rather than the party.

Under habituation, this immediate reaction should weaken with committee exposure. I do not detect such attenuation, although the estimate is imprecise. Appendix Table A16

TABLE 4: SUSTAINED AND IMMEDIATE EXPOSURE TO THE AFD

	Engagement (joint measure) (1)	Names the AfD (2)	Attention to AfD flank (3)
A. Sustained exposure: committee composition			
AfD exposure × Post	-0.415**	-0.342**	-0.267
	(0.167)	(0.151)	(0.163)
Speeches	9,376	9,376	9,376
B. Immediate salience: an AfD speech just before			
AfD spoke immediately before	–	-0.128**	0.134***
		(0.064)	(0.036)
Speeches	–	3,693	3,693

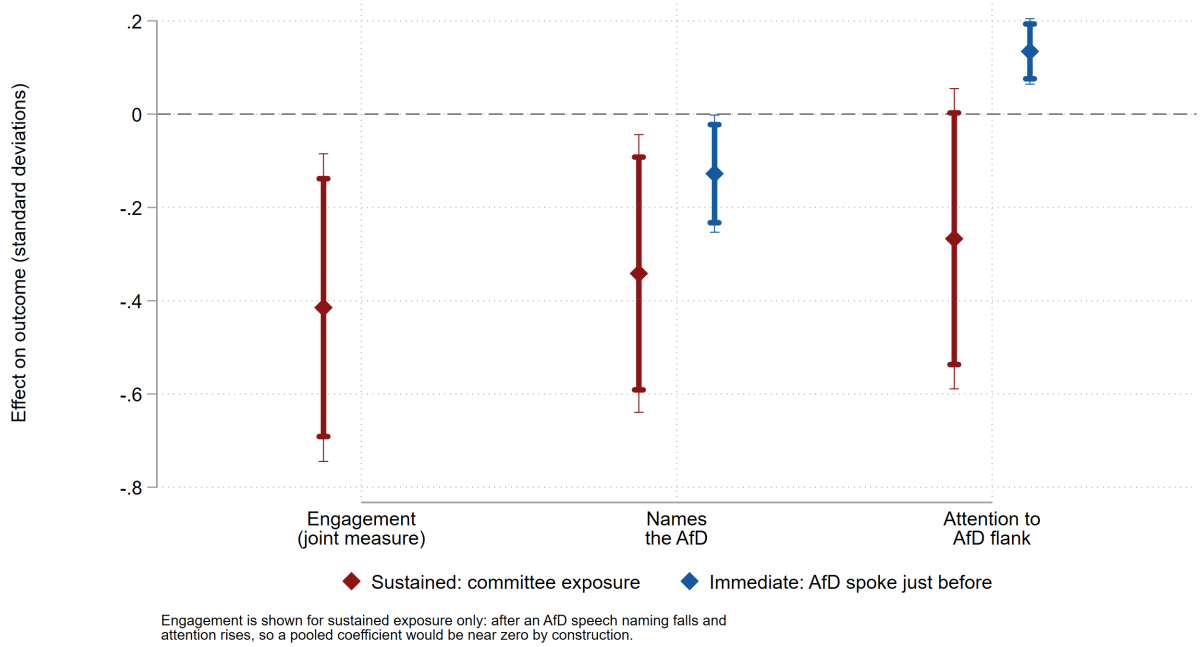
Notes: All outcomes are standardized within the estimation sample. Panel A reports the specification of Appendix Table A5, clustered on the legislator. Panel B uses post-entry speeches with an identified preceding speaker, includes legislator and quarter fixed effects, and clusters standard errors on the sitting. The panels differ in treatment, sample, and identifying assumption; the comparison concerns the direction of the responses, not equality of their magnitudes. Engagement is not reported in Panel B: after an AfD speech naming falls while attention rises, so pooling them can conceal the different responses. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

interacts the immediate response with committee exposure: the turn toward the AfD flank after an AfD speech is similar above and below median exposure ($p = 0.70$), and the estimated pitch response is stronger among the more exposed.[7]

Summary. Taken together, the pattern is more consistent with strategic avoidance than with a uniformly weaker response through habituation, although selection into the remaining references and imprecision in the immediate-response comparison prevent a clear distinction. Exposure reduces negatively worded mentions and visible orientation toward the AfD benches. Remaining mentions receive greater vocal emphasis, while the immediate orienting response does not measurably weaken. An independent sequential analysis of nine German parliaments reports the same immediate pattern: after AfD speeches, established parties become angrier in wording and more visibly activated, while average vocal pitch does not rise (Arnold, Küpfer, and Stecker 2026). Mean pitch relative to each legislator's own baseline, the measure Dietrich, Hayes, and O'Brien (2019)

[7] Arnold, Küpfer, and Stecker (2026) report the opposite sign for gesture in a sequential design covering nine German parliaments: speeches following an AfD intervention show more gesticulation. The two measures capture different margins. Theirs is the magnitude of body and hand movement; mine is the share of frames containing any visible gesture, so a legislator can gesture in fewer frames while moving more within them. Their textual and postural results otherwise match the pattern reported here.

FIGURE 6: SUSTAINED EXPOSURE AND IMMEDIATE SALIENCE



Notes: Effects of sustained committee exposure (dark red) and an immediately preceding AfD speech (blue) on engagement and its two facets, standardized. Engagement is shown for sustained exposure only: after an AfD speech naming falls while attention rises, so pooling them can conceal the different responses. Thick and thin bars are 90 and 95 percent confidence intervals.

use for vocal arousal, does not rise with exposure; it falls slightly (Appendix Table A17). More-exposed legislators do not sound more agitated overall; they speak about the AfD less often, and with more emphasis when they do.

6.3 Delivery and the AfD's profile

Beyond engagement with the AfD, the recordings show how legislators' delivery across whole speeches changes with exposure. Loudness variation falls by 0.13 standard deviations and pitch variation rises by 0.14. Gesturing falls by 0.11 standard deviations and is the least precisely estimated outcome. The FDP placebo also produces a significant loudness-variation estimate (Appendix Table A18). Treated as one family, the three delivery measures have Benjamini–Hochberg adjusted q-values of 0.39 for gesture and 0.26 for both vocal measures (Appendix Table A15). These changes all point toward the AfD's delivery profile, documented in Appendix Appendix G. Appendix Table A19 reports the coefficients and their p-values.

To assess their joint movement, I project each speech's three standardized delivery measures onto the direction from returning mainstream legislators' profile to the AfD's, both measured in the 19th Bundestag. An increase in this convergence measure means that a speech sounds and looks more like the AfD's speeches.

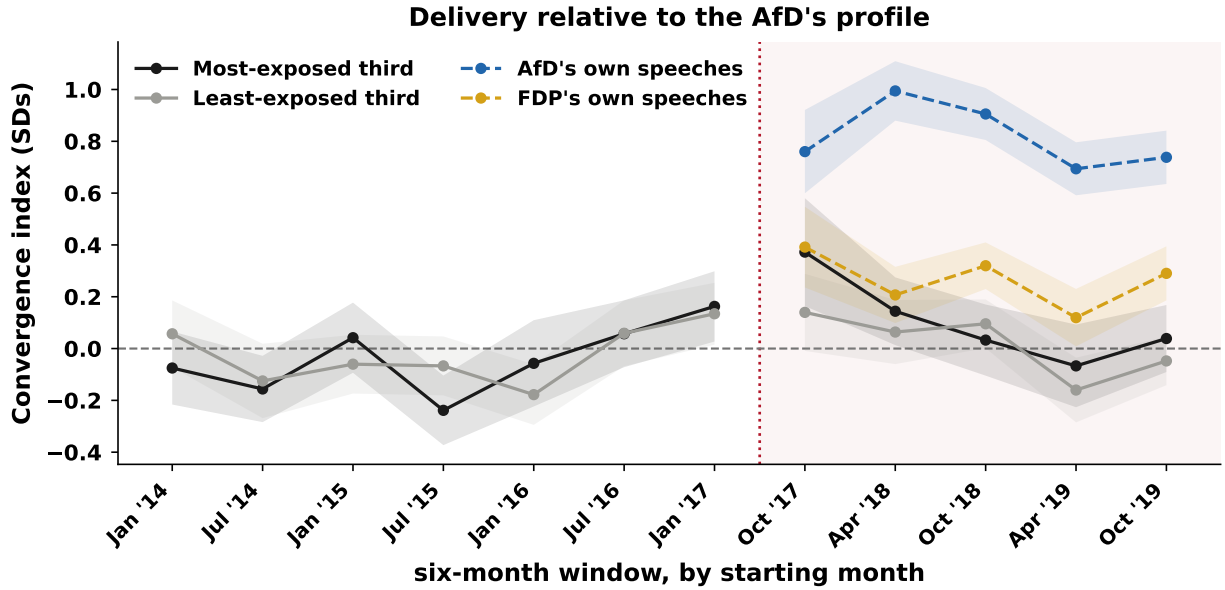
Appendix Table A20 reports the results. Moving from the least- to the most-exposed portfolio raises convergence by 0.21 standard deviations. I first examine whether this reflects movement toward inexperienced members, since most AfD legislators were new to the Bundestag: exposure does not move delivery toward the profile of first-term mainstream legislators, and the effect is almost unchanged when convergence is measured relative to that profile rather than to returning legislators. I also test whether the shift reflects the allocation rule rather than exposure to the AfD. Exposure to the FDP, which is allocated by the same rule, does not move delivery toward the AfD.

Figure 7 shows convergence over time for the most- and least-exposed thirds of the sample, together with the AfD's and the FDP's own speeches. The FDP, which returned to the Bundestag in 2017 after four years outside it, likewise varies its pitch more and its loudness less than the established parties, although it does not gesture less. Exposure moves legislators toward the FDP's profile about as much as toward the AfD's. On the one channel where the AfD and the FDP differ, gesture, the effect is small and imprecise. Figure 8 dates the movement: toward the AfD profile the joint test does not reject zero pre-entry leads ($p = 0.45$) and the shift comes after entry rather than before it. Toward the FDP profile the same omnibus test rejects ($p = 0.04$), but no individual lead is distinguishable from zero and a linear pre-trend is not ($p = 0.68$), indicating sensitivity to the specification of pre-entry dynamics. The two paths, however, move together window by window, and the level effects are 0.22 toward the FDP profile against 0.21 toward the AfD's. The timing is therefore consistent with the AfD's arrival causing the change, while the direction is not specific to the AfD. The data show that working alongside the AfD moves mainstream delivery toward the register of the AfD and the FDP, the two parties absent from the previous Bundestag. They cannot show that legislators adopt the AfD's register in particular.

6.4 Electoral incentives

In the model, a closer electoral race against the AfD raises the value of being seen to confront it (Section 6.1), and this can shift engagement toward the channels that reach voters.

FIGURE 7: DELIVERY RELATIVE TO THE AFD'S PROFILE, BY COMMITTEE EXPOSURE

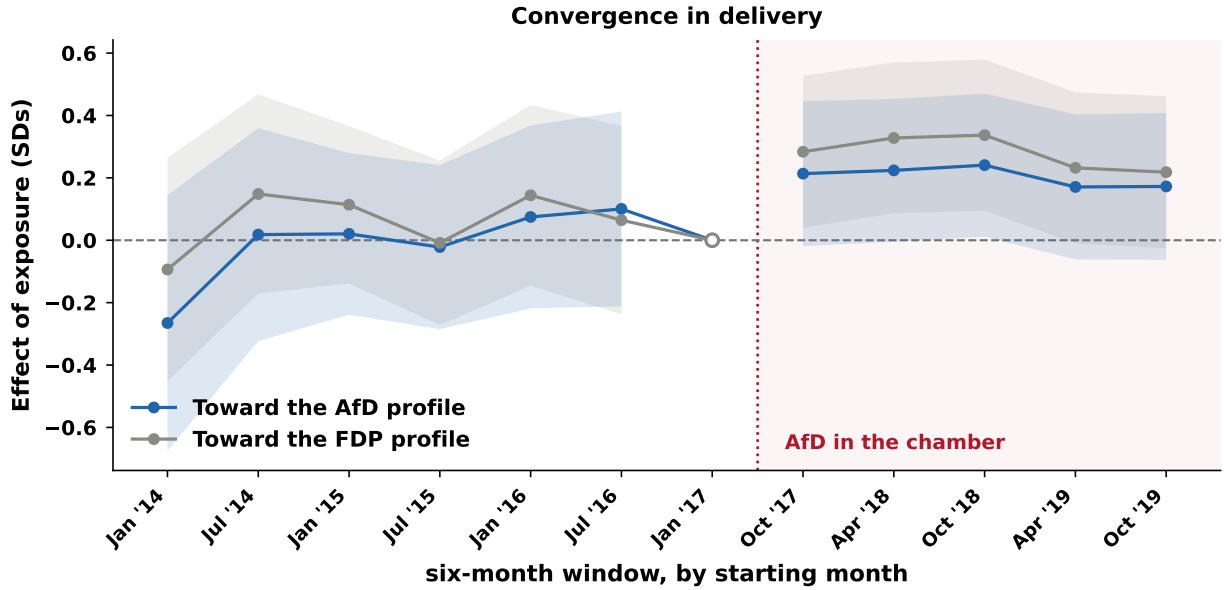


Notes: Means of movement toward the AfD's delivery profile in the six-month windows of Fig. 5 (standardized in the estimation sample) for the least- and most-exposed thirds of the estimation sample's legislators, and for speeches by AfD and FDP members after 2017 on the same measure. The dashed vertical line marks the AfD's entry.

I measure local competition as the negative gap between the legislator's party and the AfD in the constituency second vote, the vote for a party list. The measure is standardized so that higher values indicate a tighter race. The legislator's party leads the AfD in every constituency in the estimation sample; one standard deviation corresponds to a narrowing of the vote-share gap by 9.6 percentage points. I use the competition measures of Esguerra et al. (2023)—this one and the AfD's constituency vote share below—who link the spread of right-wing rhetoric among more-exposed legislators to local electoral competition. Using the same measures, I examine whether electoral pressure also shapes legislators' engagement with the AfD. Because this measure does not vary over time, identification comes from its interaction with committee exposure and the post-entry period.

Table 5 shows that local competition affects the two forms of engagement differently. The orientation interaction minus the naming interaction is -0.52 (s.e. 0.20, $p = 0.008$). This difference persists after including the East–West interaction at the same order (-0.49, s.e. 0.21, $p = 0.019$; Appendix Table A21). Pooled into engagement, the interaction is small and indistinguishable from zero (0.06, s.e. 0.18). Separating the two components

FIGURE 8: CONVERGENCE IN DELIVERY, BY HALF-YEAR RELATIVE TO THE AFD'S ENTRY



Notes: Committee AfD exposure interacted with the six-month windows of Fig. 5, relative to the last window before entry, which is the omitted reference and is drawn as a hollow marker. Shading marks the windows in which the AfD sits in the chamber. Each series projects a speech's three standardized delivery values on the direction from the profile of returning mainstream legislators to the profile of the target party. The FDP returned to the Bundestag in the same election, and its committee seats follow the same allocation rule. Joint tests that the six pre-entry coefficients are zero give $p = 0.45$ toward the AfD profile and $p = 0.04$ toward the FDP profile; for the FDP series, however, no individual lead has $|t| > 1$, a one-degree-of-freedom test for a linear pre-trend returns $p = 0.68$, and the quarterly version of the same event study returns $p = 0.37$ (Fig. C3). Bands are 95 percent confidence intervals from standard errors clustered on the legislator. Appendix C reports the same estimates by calendar quarter.

reveals responses their average conceals.

A one-standard-deviation increase in local competition offsets the exposure effect on naming by 0.30 standard deviations (s.e. 0.14, $p = 0.03$). This is attenuation rather than an established reversal. At mean competition, the implied naming effect is -0.36 ($p = 0.013$); one standard deviation above the mean it is -0.05 ($p = 0.80$). The corresponding orientation estimates are -0.26 and -0.48, respectively, with the latter significant at $p = 0.040$. Local competition is not randomly assigned and is strongly correlated with East Germany. With the East–West control, the implied naming effects are -0.37 at the mean ($p = 0.023$) and -0.06 one standard deviation above it ($p = 0.80$); the corresponding orientation effects remain negative (-0.23 and -0.41), but are imprecise ($p = 0.186$ and $p = 0.124$). Thus the relative divergence is robust to this control, while a separately established deepening of the orientation decline is not.

TABLE 5: LOCAL ELECTORAL COMPETITION WITH THE AFD

	Engagement (joint measure) (1)	Names the AfD (2)	Attention to AfD flank (3)
AfD exposure × Post	-0.423**	-0.357**	-0.264
	(0.165)	(0.143)	(0.162)
Local competition × Post	-0.347	-1.361**	0.852
	(0.720)	(0.586)	(0.728)
AfD exposure × Post × Local competition	0.063	0.305**	-0.212
	(0.179)	(0.143)	(0.182)
Legislator FE	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes
Speeches	9,376	9,376	9,376
Attention interaction minus naming interaction		-0.518 (0.195), $p = 0.008$	

Notes: Outcomes are standardized. Local competition is the negative of the gap between the legislator's own party's constituency second-vote share and the AfD's, standardized so that higher values indicate a tighter race. All specifications include legislator and quarter fixed effects. Appendix Table A21 reports the same specification with the East/West interaction included at the same order. The last row reports the attention interaction minus the naming interaction. Standard errors in parentheses. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

Measuring competition by the AfD's constituency vote share rather than by the closeness of the race changes the picture (Appendix Table A22): the naming interaction shrinks to 0.04 and is indistinguishable from zero, while the orientation interaction remains negative but imprecise (-0.34, $p = 0.13$). The attenuation in naming therefore depends on measuring competition as the closeness of the race rather than the AfD's strength. Neither measure provides evidence that electoral pressure increases visible orientation toward the AfD.

7 Conclusion

This paper shows that greater committee exposure to the AfD reduces mainstream legislators' public engagement with the party. The engagement measure captures the attention legislators direct toward the AfD through explicit references and visible orientation toward its benches.

For legislators who retain at least one committee across terms, the estimated effect of

moving from the lowest to the highest observed exposure is a 0.41-standard-deviation reduction in public engagement with the AfD. Both naming and visible orientation toward its benches decline, although the orientation result is less robust. The reduction in naming primarily reflects fewer references to the AfD in negatively worded sentences; references to the four groups represented in both terms show no comparable decline, while references to the returning FDP also fall. Fewer references coexist with changes in speech delivery that transcripts alone would not reveal, moving toward the AfD's profile, which is partly shared by the FDP.

The mechanism evidence is more consistent with strategic avoidance than with a uniformly weaker response to the AfD. Comparing legislators within party and quarter, those with greater exposure place greater vocal emphasis on sentences naming the AfD relative to the rest of the same speech. I also find no clear evidence of a weaker turn toward the AfD immediately after one of its members speaks. Selection into the remaining mentions and imprecision in the immediate-response estimate prevent a sharp distinction between the two explanations. The divergence between naming and visible orientation in constituencies with close races against the AfD is consistent with electoral incentives shaping which forms of engagement legislators retain. The decline in naming approaches zero as competition increases, while the estimated response in visible orientation remains negative. The difference between the two interactions persists after controlling for East–West differences. Video thus reveals a distinction between forms of engagement that text alone would miss.

Committees share several features with the settings in which contact has been studied: repeated interaction, similar formal status, and a common institutional task. In parliament, however, engagement also gives the party public attention, and it is performed for an audience. The decline in public engagement is consistent with a role for these audience incentives and with evidence that the medium and the audience shape how visibility translates into politicians' behavior (Gennaro and Ash 2026). These findings suggest that contact can affect public behavior differently when engaging the other party also gives it visibility.

The design estimates how public conduct changes with the intensity of committee exposure among legislators who retained at least one committee across terms. AfD colleagues account for between 11.1 and 14.3 percent of committee membership, so the estimates concern differences in exposure among legislators who all work alongside AfD members, not contact versus its absence or the overall effect of the party's entry. Baseline

exposure includes all post-entry committees; an alternative uses only retained committees to exclude newly assigned memberships. The estimates describe conduct in public speeches, conditional on taking the floor, rather than behavior inside committee meetings.

The supplementary delivery comparisons have a different scope. Delivery when naming the AfD is compared across legislators rather than within the same legislator over time. AfD exposure also shifts whole-speech delivery toward the AfD's profile, a shift not reproduced by FDP exposure. However, because the two parties share the relevant vocal characteristics and the gesture response is imprecise, the evidence does not establish adoption of a distinctively AfD style.

Applying the approach to other parliaments with video records could show how these responses vary across institutional settings. Further research could distinguish changing expectations about interaction from concerns about publicity or party expectations about appropriate conduct. Whether reduced engagement also limits influence remains open. Tracing claims and narratives through parliamentary debate and beyond it could reveal which are adopted, which are repeated to challenge them, and which reach wider audiences. The broader issue is how democratic institutions shape both the attention far-right parties receive and the influence they exercise within and beyond parliament.

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Guide to the Appendix

Appendix A collects the principal supporting figures and tables cited in the main text, Figures A1–A5 and Tables A1–A22, numbered in the order of their first citation. Other exhibits cited in the main text remain in the substantive and technical appendices that follow. Their figures and tables are numbered within each appendix: Table E3, for instance, is the third table of Appendix E. Every entry below links to the item.

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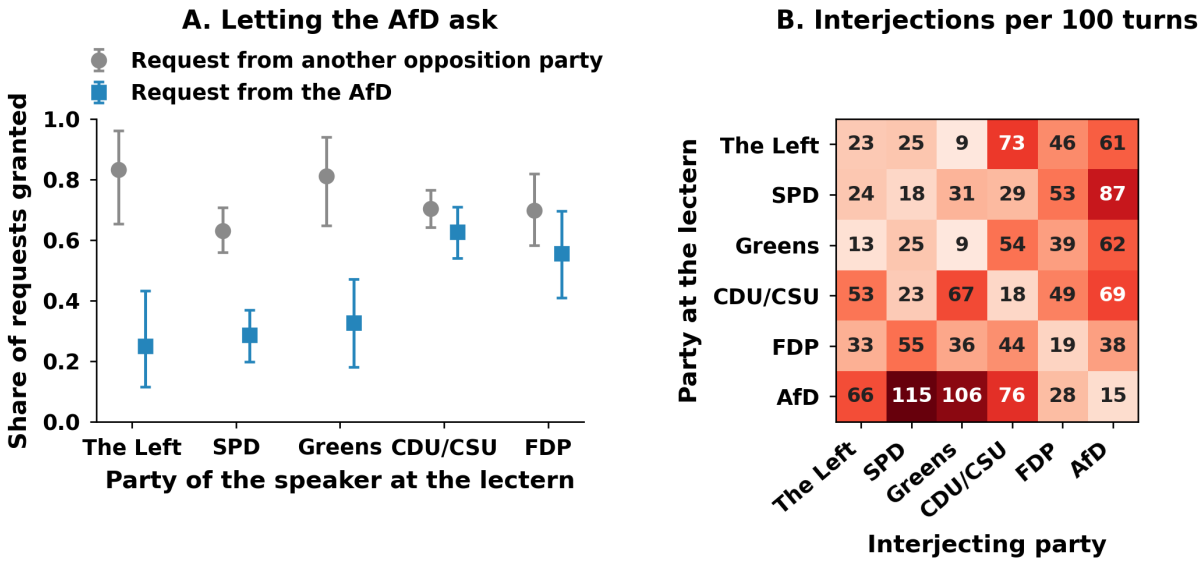
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A Figures and Tables Cited in the Main Text

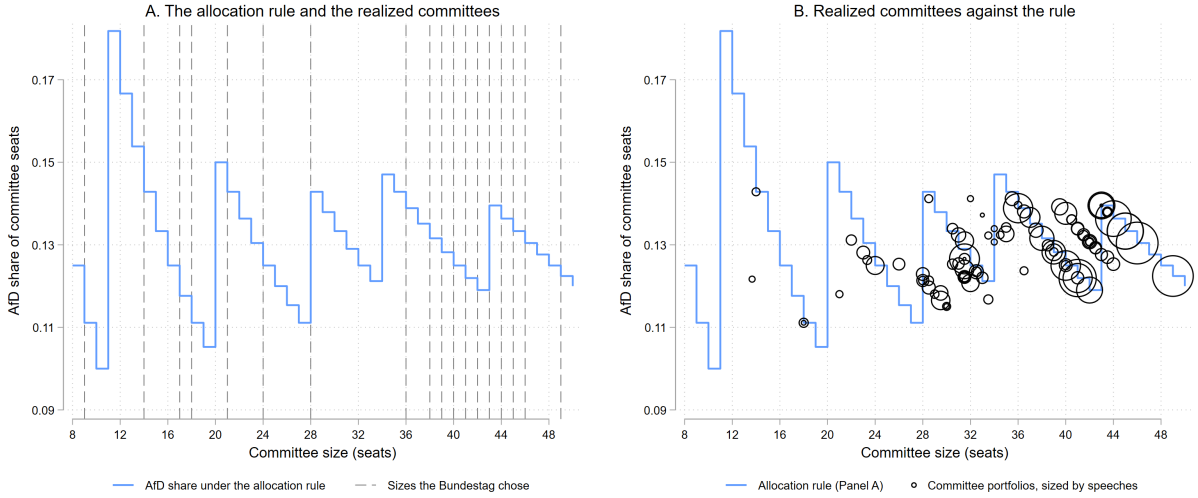
Figures

FIGURE A1: LETTING THE AFD ASK, AND HECKLING



Notes: 19th Bundestag to 13 March 2020, from the plenary record (Richter et al. 2020). Panel A: interjection requests from opposition parties to speakers of another party, with 95 percent speaker-bootstrap intervals; the within-speaker gap is from a linear probability model with speaker fixed effects, clustered by speaker. Panel B: heckles recorded in the stage directions per 100 speaking turns of the group at the lectern; a heckle attributed to several groups counts for each.

FIGURE A2: THE ALLOCATION RULE AND THE IDENTIFYING VARIATION



Notes: Panel A applies the Sainte-Laguë/Schepers procedure to the 19th Bundestag's parliamentary group strengths at its constitutive session (AfD: 92 of 709 seats) for every committee size between 8 and 50 seats, and plots the AfD's resulting share of committee seats. With these strengths the procedure reproduces the AfD's seats in every committee of the term. The dashed vertical lines mark the sizes the Bundestag actually chose for its 25 committees (18 distinct sizes, 9 to 49 seats), so the steps they fall on are the shares those committees received. Panel B plots the realized units in the estimation sample against that same rule, as circles whose size is proportional to the number of speeches each contributes. *These units are committee portfolios rather than single committees*—a legislator on two committees appears once, at the mean of their committees' sizes and the mean of their AfD shares, which is why several markers sit at half-integer committee sizes.

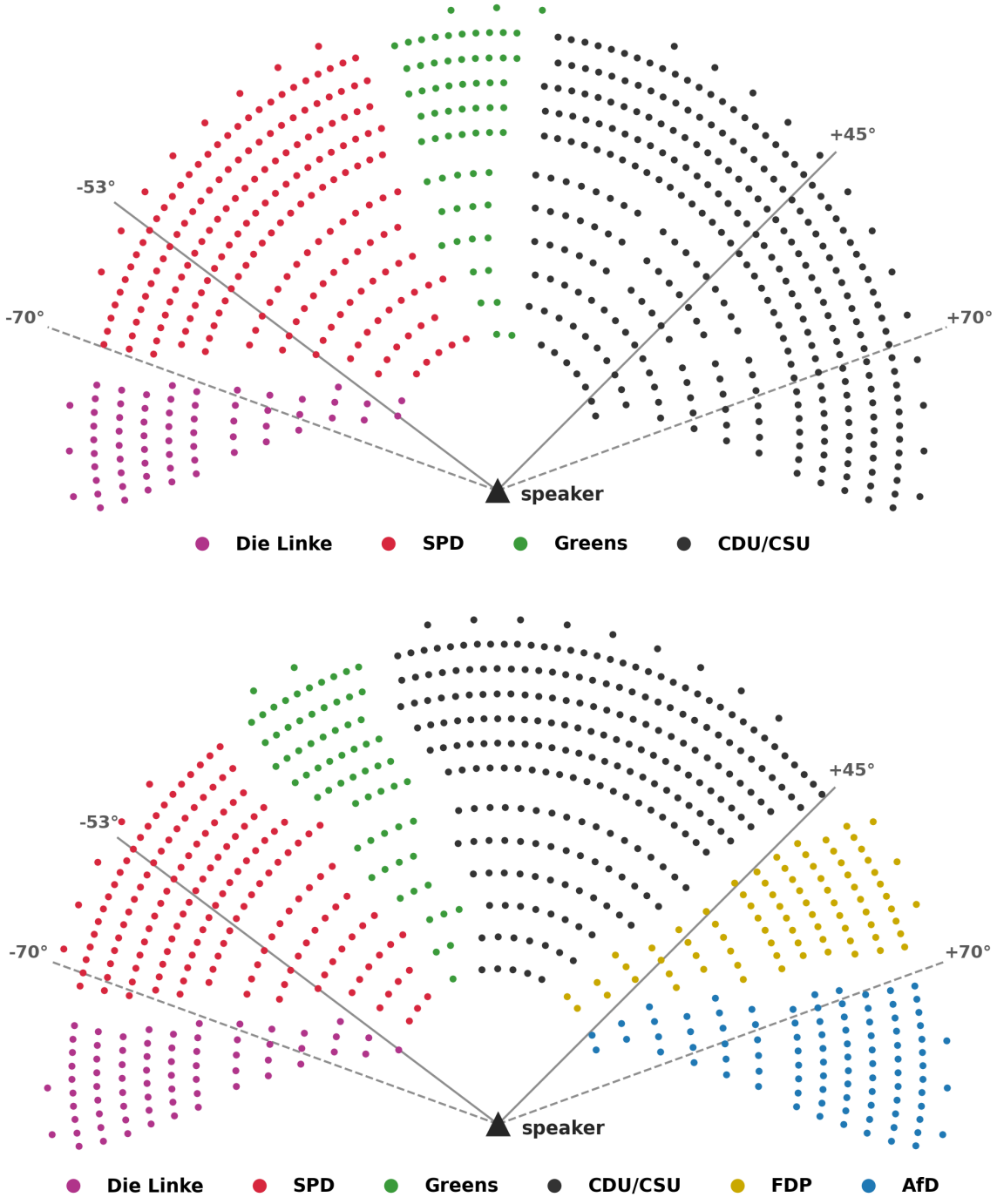
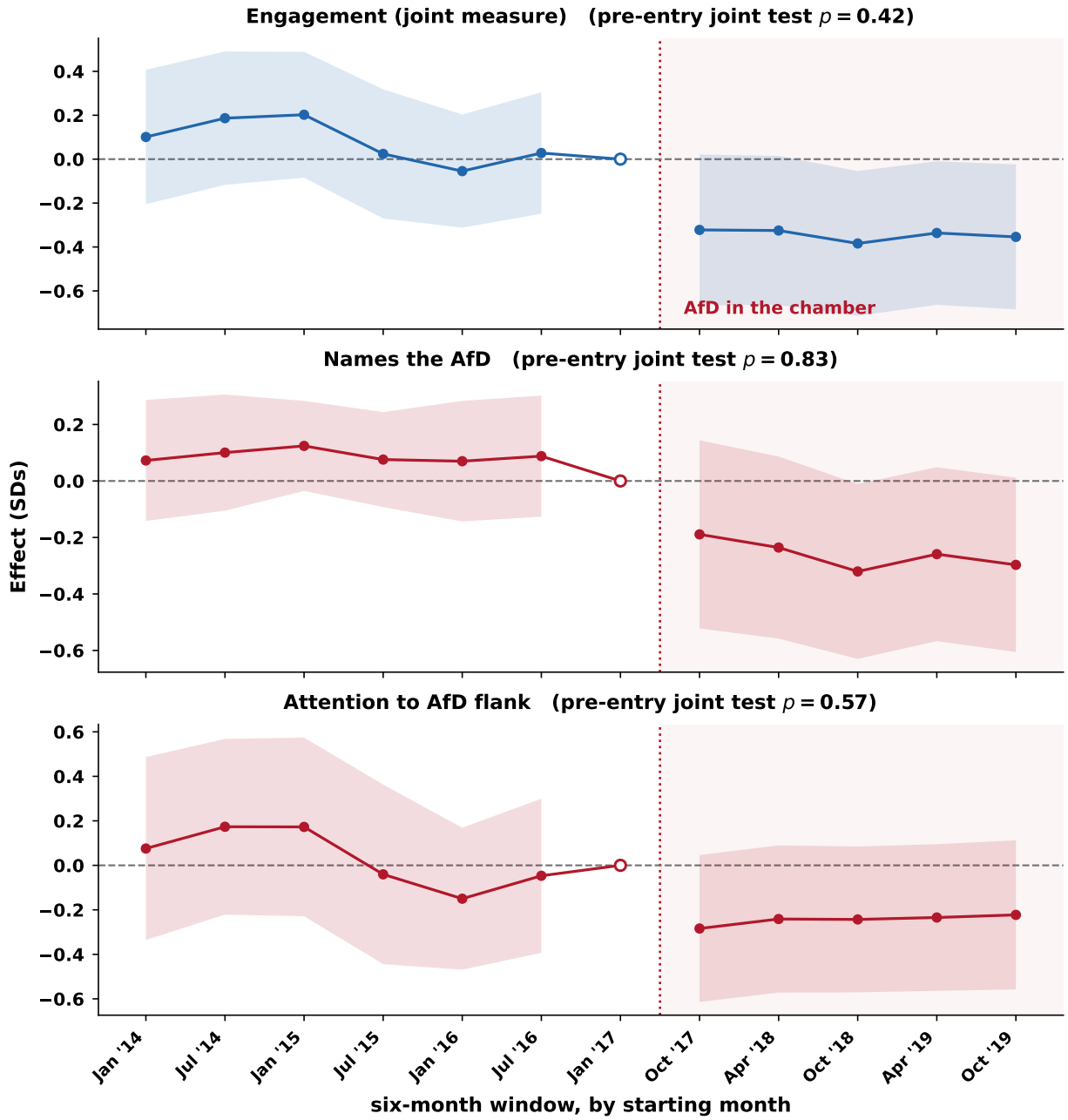


FIGURE A3: THE CHAMBER IN BOTH TERMS, AS THE SPEAKER AT THE LECTERN SEES IT

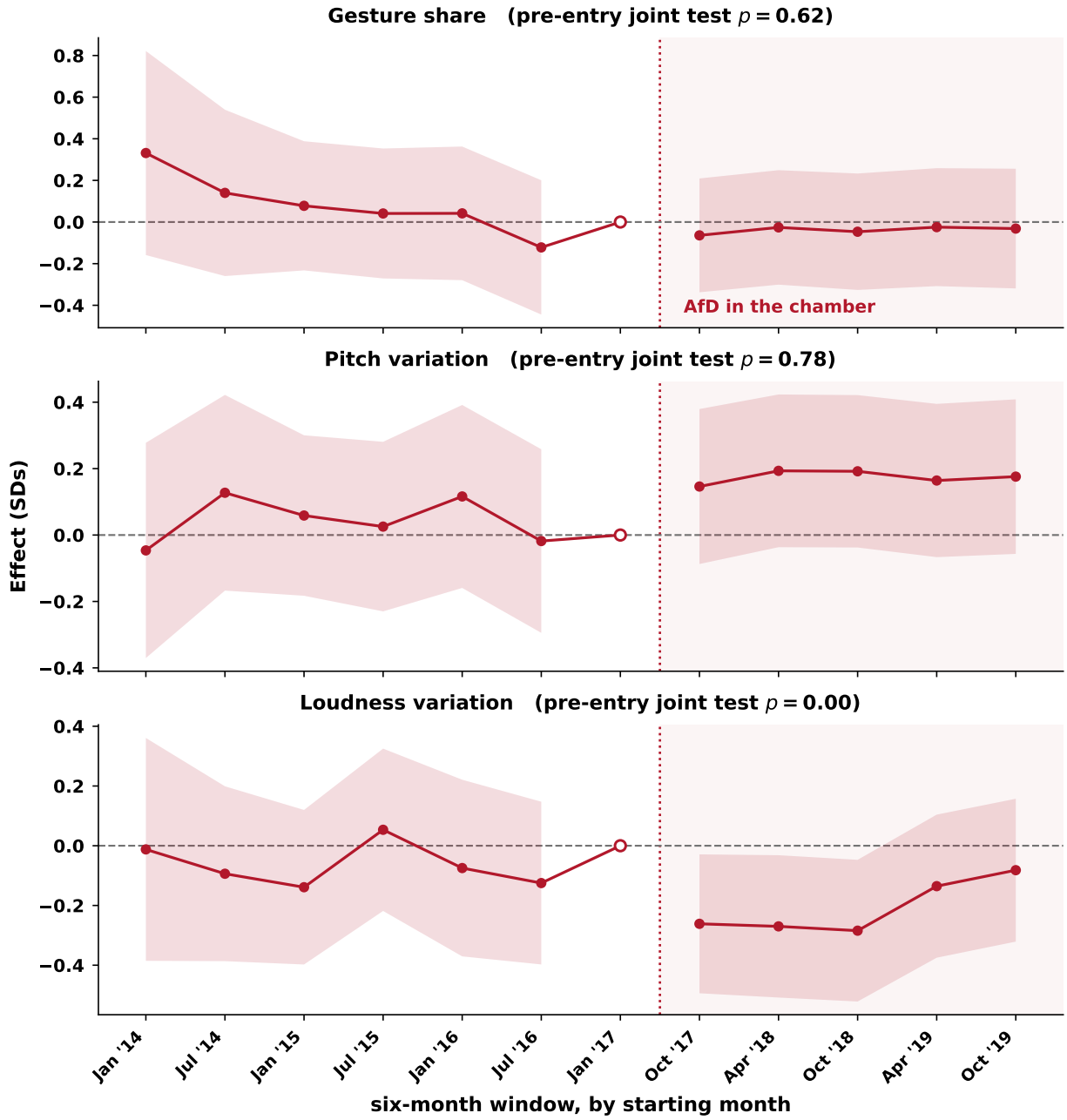
Notes: Each dot is a seat, coloured by parliamentary group, with aisles left empty. The sector bounds are drawn solid at their inner edge, $+45°$ and $-53°$, and dashed at the outer one as by Arnold and Küpfer (2024), $+70°$ and $-70°$.

FIGURE A4: ENGAGEMENT AND ITS FACETS, BY HALF-YEAR RELATIVE TO THE AFD'S ENTRY



Notes: Specification of Fig. 5, with the same six-month windows and the same omitted reference window, for engagement and its two facets. Outcomes standardized. Joint tests that the six pre-entry coefficients are zero give $p = 0.42$ for engagement, $p = 0.83$ for naming and $p = 0.57$ for attention. Bands are 95 percent confidence intervals from standard errors clustered on the legislator. Figure C1 reports the same estimates by calendar quarter.

FIGURE A5: DELIVERY MEASURES, BY HALF-YEAR RELATIVE TO THE AFD'S ENTRY



Notes: Specification of Fig. 5 for gesture share, pitch variation and loudness variation. Outcomes standardized. Joint tests that the six pre-entry coefficients are zero give $p = 0.62$ for gesture share and $p = 0.78$ for pitch variation, but $p = 0.002$ for loudness variation, which does move before entry. Bands are 95 percent confidence intervals from standard errors clustered on the legislator. Figure C2 reports the same estimates by calendar quarter.

Tables

TABLE A1: SAMPLE CONSTRUCTION

Stage	Speeches	Legislators
Plenary speeches, 18th and 19th Bundestag	32,180	–
within the sample window (to 13 March 2020)	23,791	922
mainstream parties only	20,719	748
committee exposure and metadata observed	13,338	440
at least one committee retained across terms	9,800	270
usable frontal footage	9,390	270
at least 100 words	9,385	270
usable gesture data	9,379	270
single-speech legislator and singleton quarter removed	9,376	269
Estimation sample	9,376	269

Notes: Restrictions are cumulative and listed in the order they bind. The first row counts every dated plenary speech of the two electoral terms, including sittings after the sample window closes. The steps from official recordings to the multimodal panel are documented in Appendix H.

TABLE A2: LEGISLATOR CHARACTERISTICS AND COMMITTEE AFD EXPOSURE

	Female (1)	Age (2)	East Germany (3)	Foreign-born (4)	Academic title (5)	Direct mandate (6)	Committee size (7)
AfD exposure	-0.173	-3.155	-0.159	0.039	0.050	0.104	6.148
	(0.119)	(2.965)	(0.130)	(0.025)	(0.105)	(0.134)	(4.637)
Joint test, columns 1–6	$F(6, 92) = 4.08$, $p = 0.001$						
Legislators	269	269	269	269	269	269	269

Notes: One observation per legislator. Each column regresses a predetermined characteristic on committee AfD exposure, scaled from the least- to the most-exposed committee portfolio, with standard errors clustered on the legislator's 19th-term committee portfolio, of which there are 93 in the sample; the joint test below therefore has 92 denominator degrees of freedom. Committee size, in the final column, is a property of the institution that generates the treatment rather than a characteristic of the legislator, and is reported here because the design turns on it, not as a balance test. The direct-mandate column records whether a legislator won a constituency seat, taken from MANDATSART in the Bundestag register; 53.5 percent of the sample did. These characteristics are fixed within the sample period and are absorbed by the legislator fixed effect in every specification in the paper. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

TABLE A3: FDP PLACEBO

	Engagement (joint measure) (1)	Names the AfD (2)	Attention to AfD flank (3)
FDP exposure × Post	0.168	0.049	0.198
	(0.222)	(0.206)	(0.211)
Legislator FE	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes
Speeches	9,376	9,376	9,376

Notes: Main analysis with committee FDP exposure instead of AfD exposure, scaled to its own least-to-most contrast; specification otherwise identical to Table A5. Standard errors in parentheses. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

TABLE A4: COMMITTEE SIZE AND TOPIC CONTROLS

Controls added	Engagement (joint measure)	Names the AfD	Attention to AfD flank	Speeches
Baseline	-0.415**	-0.342**	-0.267	9,376
	(0.167)	(0.151)	(0.163)	
Committee size × Post	-0.362**	-0.316**	-0.215	9,376
	(0.173)	(0.154)	(0.168)	
Size and size^2 × Post	-0.361**	-0.329**	-0.200	9,376
	(0.173)	(0.153)	(0.171)	
Size terciles × Post	-0.393**	-0.342**	-0.236	9,376
	(0.171)	(0.148)	(0.168)	
Topic shares	-0.415**	-0.307*	-0.302*	8,877
	(0.176)	(0.160)	(0.169)	
Topic shares and topic shares × Post	-0.417**	-0.289*	-0.323*	8,877
	(0.184)	(0.170)	(0.174)	
Size × Post and topics × Post	-0.366*	-0.271	-0.266	8,877
	(0.193)	(0.172)	(0.183)	

Notes: Specification of Table A5 with the indicated controls added; outcomes standardized. Committee size is the mean size of the legislator's committees in the 19th term. Topic shares are the speech's BERTopic shares, one omitted; speeches without topic shares drop out of those rows. Standard errors in parentheses. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

TABLE A5: SUSTAINED COMMITTEE EXPOSURE AND ENGAGEMENT WITH THE AFD: COEFFICIENTS

	Engagement (joint measure) (1)	Names the AfD (2)	Attention to AfD flank (3)
AfD exposure × Post	-0.415**	-0.342**	-0.267
	(0.167)	(0.151)	(0.163)
Legislator FE	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes
Speeches	9,376	9,376	9,376

Notes: Column 1 is engagement, the equally weighted average of the two standardized facets in columns 2 and 3, restandardized over the estimation sample. Each column is a separate regression on committee AfD exposure interacted with an indicator for the post-entry period, with legislator and calendar-quarter fixed effects. All outcomes are standardized, so coefficients are in outcome standard deviations; the text gives the corresponding magnitudes in percentage points. The treatment is scaled so the coefficient is the effect of moving from the least- to the most-exposed committee portfolio, a 3.2 percentage point change in the AfD share of a legislator's committee colleagues. Standard errors are clustered on the legislator; Table A13 reports these coefficients under further inference procedures, Table A19 the delivery coefficients, and Appendix L the construction of the delivery channels. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

TABLE A6: JOINT TEST OF PRE-ENTRY TRENDS, BY CALENDAR QUARTER

Outcome	p (all leads = 0)
Engagement (joint measure)	0.714
Names the AfD	0.503
Attention to AfD flank	0.710

Notes: p-values from the joint test that the seven pre-entry quarter coefficients in Fig. C1 are zero, by outcome. The half-year tests are in the notes to Figs. A4 and 5.

TABLE A7: SPECIFICATION SWEEP

Specification	Engagement (joint measure)	Names the AfD	Attention to AfD flank
Baseline	-0.415**	-0.342**	-0.267
Month instead of quarter FE	-0.402**	-0.319**	-0.270*
No minimum speech length	-0.413**	-0.340**	-0.267
Gesture-availability filter dropped	-0.415**	-0.347**	-0.267
Speeches weighted to equalize speakers	-0.413**	-0.220	-0.387***
Same-committee restriction dropped	-0.327**	-0.272**	-0.208

Notes: Each row varies one modeling choice relative to the baseline of Table A5; entries are coefficients on committee AfD exposure $\times$ post, with all outcomes standardized. The gesture-availability row relaxes the requirement that a speech carries usable gesture classifications. Stars come from standard errors clustered on the legislator, which this table does not display; Table A5 reports them for the baseline row. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

TABLE A8: MINIMUM SPEECH LENGTH

Minimum words	Engagement (joint measure)	Names the AfD	Attention to AfD flank	Speeches
None	-0.413**	-0.340**	-0.267	9,384
50	-0.413**	-0.341**	-0.267	9,383
100	-0.415**	-0.343**	-0.267	9,379
200	-0.416**	-0.344**	-0.269	9,367
300	-0.413**	-0.337**	-0.270	9,346
400	-0.409**	-0.350**	-0.250	9,241
500	-0.429**	-0.411**	-0.218	8,676

Notes: Each row applies a different minimum speech length and re-estimates the baseline of Table A5; entries are coefficients on committee AfD exposure $\times$ post, with outcomes standardized on the baseline sample so the columns are comparable down the rows. Speech counts are before the estimator drops singleton legislators and quarters. The paper's floor of 100 words is inherited from Esguerra et al. (2023); here it excludes five speeches. Stars come from standard errors clustered on the legislator, which this table does not display; Table A5 reports them for the baseline row. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

TABLE A9: THE NUMBER OF AFD MEMBERS INSTEAD OF THE SHARE

	Engagement (joint measure)		Names the AfD		Attention to AfD flank	
	(1)	(2)	(3)	(4)	(5)	(6)
AfD members × Post	-0.102**	-0.248*	-0.062*	-0.217*	-0.087**	-0.147
	(0.039)	(0.141)	(0.035)	(0.129)	(0.039)	(0.140)
Committee size × Post		0.021		0.022		0.009
		(0.020)		(0.018)		(0.019)
Legislator FE	Yes	Yes	Yes	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
Speeches	9,376	9,376	9,376	9,376	9,376	9,376

Notes: Specification of Table A5 with the treatment replaced by the mean number of AfD members on the legislator's committees interacted with the post period; odd columns alone, even columns holding the mean committee size × post fixed. Coefficients per additional AfD member in outcome standard deviations. Standard errors clustered on the legislator.

TABLE A10: PARTY HETEROGENEITY ACROSS ATTENTION-SECTOR DEFINITIONS

	AfD flank			Die Linke flank	
	Episode $\geq +45°$	Episode $+45°$–$+70°$	Word share $\geq +45°$	$\leq -53°$	$-70°$–$-53°$
	(1)	(2)	(3)	(4)	(5)
AfD exposure × Post (CDU/CSU)	-0.036	-0.049	0.078	0.136	0.132
	(0.261)	(0.278)	(0.285)	(0.138)	(0.141)
× SPD	-0.152	-0.136	-0.295	-0.021	-0.003
	(0.338)	(0.362)	(0.350)	(0.276)	(0.281)
× Greens	-0.486	-0.445	-0.370	-0.196	-0.181
	(0.428)	(0.453)	(0.386)	(0.179)	(0.183)
× Left	-0.704	-0.589	-0.969	-0.144	-0.125
	(0.824)	(0.790)	(0.752)	(0.243)	(0.245)
p (equal across parties)	0.625	0.727	0.560	0.715	0.765
Legislator FE	Yes	Yes	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes	Yes	Yes
Speeches	9,376	9,376	9,376	9,376	9,376

Notes: The pooled party-interaction model of Table F1 applied to each measure of directional attention, all standardized. As there, the first row is the CDU/CSU effect and the other rows are differences from it. The AfD-flank columns differ in whether the sector is left open or bounded at $+70°$ as Arnold and Küpfer (2024) define it, and in whether words are aggregated as sustained episodes or as a plain share. The Die Linke columns differ the same way, open or bounded at $-70°$. Both flanks open where that group's benches first come into view, $+45°$ and $-53°$ (Sections G.4 and K.1); both sectors also include seats of the neighbouring group. Standard errors in parentheses. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

TABLE A11: OPEN-ENDED AND BOUNDED AFD FLANK

	Episode		Word share	
	Open (1)	Bounded (2)	Open (3)	Bounded (4)
AfD exposure × Post	-0.020	-0.018	-0.012	-0.010
	(0.012)	(0.012)	(0.010)	(0.009)
Effect in outcome SD	-0.267	-0.265	-0.183	-0.196
p	0.103	0.121	0.243	0.265
Outcome mean	0.045	0.042	0.036	0.030
Legislator FE	Yes	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes	Yes
Speeches	9,376	9,376	9,376	9,376

Notes: Specification of Table A5. "Open" counts every angle of $+45^\circ$ or more; "bounded" stops at $+70^\circ$, which Arnold and Küpfer (2024) give as the far edge of the AfD block. Episode measures are the share of aligned words assigned to a sustained episode of orientation toward the sector (the headline measure in its open version); word shares are the share of words spoken with the head in the sector. Standard errors clustered on the legislator in parentheses.

TABLE A12: WITHOUT THE COMMITTEE RESTRICTION: STAYERS AND CHANGERS

	Engagement (joint measure) (1)	Names the AfD (2)	Attention to AfD flank (3)
A. All mainstream legislators (no committee restriction)			
AfD exposure × Post	-0.327**	-0.272**	-0.208
	(0.152)	(0.138)	(0.157)
Speeches	12,583	12,590	12,583
B. Stayers: at least one committee held in both terms			
AfD exposure × Post	-0.415**	-0.342**	-0.267
	(0.167)	(0.151)	(0.163)
Speeches	9,376	9,376	9,376
C. Changers: no committee held in both terms			
AfD exposure × Post	0.144	0.055	0.156
	(0.363)	(0.341)	(0.466)
Speeches	3,206	3,212	3,206
p (stayers = changers)	0.297	0.217	0.742
Legislator FE	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes

Notes: Specification of Table A5, outcomes in the estimation sample's standard deviations. Panel A drops the requirement that a legislator sat on at least one of the same committees in both terms, as in Esguerra et al. (2023). Panel B is the estimation sample of Table A5; Panel C the legislators the restriction removes. Standard errors are clustered on the legislator, as in Table A5. The last row tests equality of the stayer and changer coefficients in one pooled model with common time effects. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

TABLE A13: ALTERNATIVE INFERENCE PROCEDURES

		Cluster-robust p			Randomization
Outcome	Coefficient	Legislator	Committee × period	Wild bootstrap	inference p, redrawn sizes
Engagement (joint measure)	-0.415	0.014	0.006	0.017	0.044
Names the AfD	-0.342	0.025	0.017	0.023	0.095
Attention to AfD flank	-0.267	0.103	0.066	0.106	0.136

Notes: p-values for the coefficient on committee AfD exposure × post from Table A5, under four inference procedures. The first p-value column is the paper's baseline, clustered on the legislator; the second repeats the exercise on committee portfolio × period cells, to show sensitivity to the clustering choice. The wild cluster bootstrap clusters on the legislator, with Webb weights and 1,999 replications. Randomization inference redraws each committee's size 2,000 times from the distribution of historical changes in relative committee size (Fig. B1), applies the Sainte-Laguë/Schepers procedure to the redrawn sizes, and rebuilds each legislator's exposure as the mean over their own committees, reporting the share of draws producing an estimate at least as large in absolute value as the observed one. Redrawing the rule's input is more conservative than permuting its realized output; Section C.4 reports both and the recentred estimates.

TABLE A14: DESIGN-BASED CHECKS

	Engagement (joint measure)	Names the AfD	Attention to AfD flank
A. Coefficients			
Baseline	-0.415	-0.342	-0.267
	(0.167)	(0.151)	(0.163)
Recentred (Borusyak–Hull)	-0.360	-0.294	-0.235
	(0.138)	(0.119)	(0.145)
Differential trends	-0.410	-0.353	-0.248
	(0.148)	(0.138)	(0.153)
Exposure from retained committees only	-0.270	-0.295	-0.101
	(0.156)	(0.146)	(0.152)
B. Randomization inference (p)			
Permuted realized shares	0.003	0.036	0.051
Redrawn committee sizes	0.044	0.095	0.136
Redrawn sizes, recentred	0.075	0.169	0.211
C. Leave one committee out, 25 estimates			
Range of the coefficient	$-0.528, -0.311$	$-0.523, -0.230$	$-0.398, -0.140$
Significant at 10 percent	25 of 25	24 of 25	7 of 25
Significant at 5 percent	23 of 25	21 of 25	2 of 25

Notes: Coefficients in outcome standard deviations, standard errors clustered on the legislator in parentheses; the three randomization rows report p-values from 2,000 draws. Recentred: exposure minus its expected value over redrawn committee sizes (Borusyak and Hull 2023). Differential trends: each characteristic of Table A2 interacted with the post period, plus party $\times$ quarter and East $\times$ quarter fixed effects. Retained committees: exposure built only from committees a legislator held in both terms. Leave one committee out: each of the 25 standing committees dropped in turn.

TABLE A15: MULTIPLICITY ADJUSTMENT WITHIN FAMILIES

Outcome	Raw p	Wild bootstrap p	Family-adjusted p
A. Confirmatory outcome (no family correction)			
Engagement (joint measure)	0.014	0.017	–
B. Family of engagement facets (Holm)			
Names the AfD	0.025	0.022	0.049
Attention to AfD flank	0.103	0.106	0.103
C. Delivery family, supplementary (Benjamini–Hochberg)			
Gesture share	0.391	0.394	0.391
Pitch variation	0.170	0.176	0.255
Loudness variation	0.136	0.149	0.255

Notes: Two-sided p-values for the coefficient on committee AfD exposure $\times$ post, adjusted within families. Panel A is the confirmatory outcome, engagement: one hypothesis, so no family correction applies. Panel B treats the two facets of engagement, naming the AfD and attention to the AfD flank, as the family of engagement facets; with two outcomes, Holm's step-down procedure controls the probability of any false rejection. Panel C treats gesture, pitch variation and loudness variation as the delivery family, which is supplementary and describes how speeches are delivered; these carry no common directional prediction, so I control the Benjamini–Hochberg false discovery rate. Raw values are the baseline cluster-robust p-values of Table A13 (engagement and its facets) and Table A19 (delivery); the wild bootstrap clusters on the legislator.

TABLE A16: DOES SUSTAINED EXPOSURE MODERATE THE IMMEDIATE RESPONSE?

	Names the AfD (1)	Attention to AfD flank (2)	Gesture share (3)	Pitch variation (4)	Loudness variation (5)
A. Interaction with committee exposure, centred at its mean					
AfD spoke immediately before	-0.128**	0.135***	-0.076***	0.019	0.058**
	(0.064)	(0.036)	(0.029)	(0.026)	(0.023)
× AfD exposure	-0.332	0.090	0.092	0.250**	0.062
	(0.310)	(0.213)	(0.168)	(0.113)	(0.118)
B. AfD spoke immediately before, by sustained exposure (median split)					
Exposure above median	-0.175**	0.117**	-0.079*	0.059	0.097***
	(0.084)	(0.057)	(0.041)	(0.040)	(0.036)
Exposure at or below median	-0.079	0.152**	-0.073	-0.024	0.017
	(0.094)	(0.059)	(0.046)	(0.030)	(0.034)
p (equal effects)	0.441	0.701	0.937	0.093	0.130
Legislator FE	Yes	Yes	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes	Yes	Yes
Speeches	3,693	3,693	3,693	3,693	3,693

Notes: Post-entry speeches with matched speech context, as in panel B of Table 4; legislator and quarter fixed effects, standard errors clustered on the sitting. Panel A interacts the indicator for an immediately preceding AfD speech with committee exposure, centred at its sample mean. The first row is therefore the immediate response for a legislator of average exposure, and the second shows how that response changes from the least- to the most-exposed committee; exposure's own main effect is absorbed by the legislator fixed effects. Panel B estimates the immediate response separately for legislators above and at or below the median exposure; the p row tests equality. All outcomes standardized. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

TABLE A17: MEAN PITCH RELATIVE TO THE SPEAKER'S BASELINE

	Mean pitch		Pitch
	Semitones (1)	Within-speaker SD (2)	variation (3)
AfD exposure × Post	-0.220	-0.226	0.136
	(0.207)	(0.170)	(0.099)
AfD spoke immediately before	-0.177***	-0.187***	0.018
	(0.052)	(0.045)	(0.026)

Notes: Mean pitch is the speech's mean fundamental frequency in semitones. First column: legislator fixed effects do the baselining. Second column: standardized within legislator, as in Dietrich, Hayes, and O'Brien (2019). Third column: the pitch-variation outcome of Table A5, for comparison. First row: specification of Table A5; second row: specification of panel B of Table 4. Standard errors in parentheses. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

TABLE A18: FDP PLACEBO: DELIVERY MEASURES

	Gesture share (1)	Pitch variation (2)	Loudness variation (3)
FDP exposure × Post	-0.120	0.049	0.248*
	(0.211)	(0.157)	(0.147)
Legislator FE	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes
Speeches	9,376	9,376	9,376

Notes: Specification of Table A3 for the three delivery measures. Standard errors in parentheses. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

TABLE A19: ALTERNATIVE INFERENCE PROCEDURES: DELIVERY OUTCOMES

		Cluster-robust p			Randomization
Outcome	Coefficient	Legislator	Committee × period	Wild bootstrap	inference p, redrawn sizes
Gesture share	-0.105	0.391	0.202	0.394	0.311
Pitch variation	0.136	0.170	0.068	0.176	0.237
Loudness variation	-0.129	0.136	0.040	0.149	0.139

Notes: The three delivery outcomes, with their coefficients in the first column, under the four procedures of Table A13, which reports engagement and its two facets. Columns and procedures are defined identically there. Delivery describes how the remaining engagement is expressed rather than how much of it there is, and is treated throughout the paper as a supplementary family, the delivery family (Table A15).

TABLE A20: DOES DELIVERY MOVE TOWARD THE AFD'S PROFILE?

Outcome (standardized)	AfD exposure × Post	FDP exposure × Post
Toward the AfD profile	0.205**	0.065
	(0.099)	(0.157)
Toward the FDP profile	0.215**	-0.055
	(0.095)	(0.146)
Toward the AfD profile, net of first-term register	0.191**	0.065
	(0.096)	(0.148)
Toward the first-term register	0.053	0.004
	(0.118)	(0.198)
Distance to the AfD profile	-0.322**	0.387
	(0.157)	(0.249)

Notes: The projection rows project a speech's standardized gesture share, pitch variation and loudness variation on the direction from the profile of returning mainstream legislators to the target profile in Table G1. "Net of first-term register" uses the direction from first-term mainstream legislators to the AfD. Distance is the Euclidean distance to the AfD profile. All outcomes standardized. Specification of Table A5; the second column replaces AfD exposure with FDP exposure, scaled to its own least-to-most contrast. Standard errors in parentheses. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

TABLE A21: LOCAL COMPETITION, NET OF EAST/WEST

	Engagement (joint measure) (1)	Names the AfD (2)	Attention to AfD flank (3)
AfD exposure × Post	-0.413**	-0.375**	-0.232
	(0.178)	(0.164)	(0.175)
AfD exposure × Post × Local competition	0.096	0.315**	-0.174
	(0.186)	(0.150)	(0.190)
AfD exposure × Post × East	0.037	0.141	-0.087
	(0.485)	(0.362)	(0.466)
Legislator FE	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes
Speeches	9,376	9,376	9,376

Notes: Specification of Table 5 with the triple interaction of exposure, post and an indicator for East Germany added. Local competition is the negative of the gap between the legislator's own party's constituency second-vote share and the AfD's, standardized so that higher values indicate a tighter race. The lower-order interactions (local competition × post, East × post) are included and not shown; their own main effects are absorbed by the legislator fixed effects. Outcomes standardized; standard errors clustered on the legislator in parentheses. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

TABLE A22: AFD CONSTITUENCY VOTE SHARE AS THE COMPETITION MEASURE

	Engagement (joint measure) (1)	Names the AfD (2)	Attention to AfD flank (3)
AfD exposure × Post	-0.423**	-0.341**	-0.281*
	(0.168)	(0.151)	(0.161)
AfD vote share × Post	0.848	-0.186	1.431
	(1.032)	(0.784)	(0.903)
AfD exposure × Post × AfD vote share	-0.201	0.046	-0.341
	(0.258)	(0.196)	(0.226)
Legislator FE	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes
Speeches	9,376	9,376	9,376

Notes: Specification of Table 5 with the AfD's constituency second-vote share, standardized, in place of local competition. The share does not vary over time, so its main effect is absorbed by the legislator fixed effects and it enters interacted with post and with exposure × post. Outcomes standardized; standard errors clustered on the legislator in parentheses. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

Part I

Substantive Appendix

Appendix B documents the institutional source of variation and the construction of the estimation sample. Appendix C reports further evidence on identification and inference, including whether the decline is specific to the AfD and whether it works through the choice of debate. Appendix D examines where withdrawn attention goes, alternative specifications, samples and measures, and the timing of the response. Appendix E turns to selection into speaking and into the estimation sample, and Appendix F to the interpretation of the estimates and their heterogeneity. Appendix G is descriptive: it uses the wider corpus to show how the AfD speaks and how the chamber receives it, without using the allocation rule. Figures and tables are numbered within each appendix.

B Institutional Detail and Sample Construction

This appendix documents how committee sizes and the Sainte-Laguë/Schepers procedure generate the variation in exposure, and how the estimation sample is built.

Figure A2 sets out the rule. Panel A holds the 19th Bundestag's parliamentary group strengths fixed and traces the AfD's share of committee seats as a function of committee size alone; the dashed lines mark the sizes the Bundestag actually chose for its committees. The result is a step function that is neither monotone nor flat: a committee of twenty-eight seats and a committee of thirty-one seats give the AfD different shares of the room, and which side of a step a committee falls on is a function of a size decision made for reasons of workload and portfolio scope. Panel B shows where the realized committees sit on that function, and thus which variation the estimates use. Across the committees in the estimation sample the AfD's share ranges from 11.1 to 14.3 percent, a spread of 3.2 percentage points.

B.1 Committee sizes

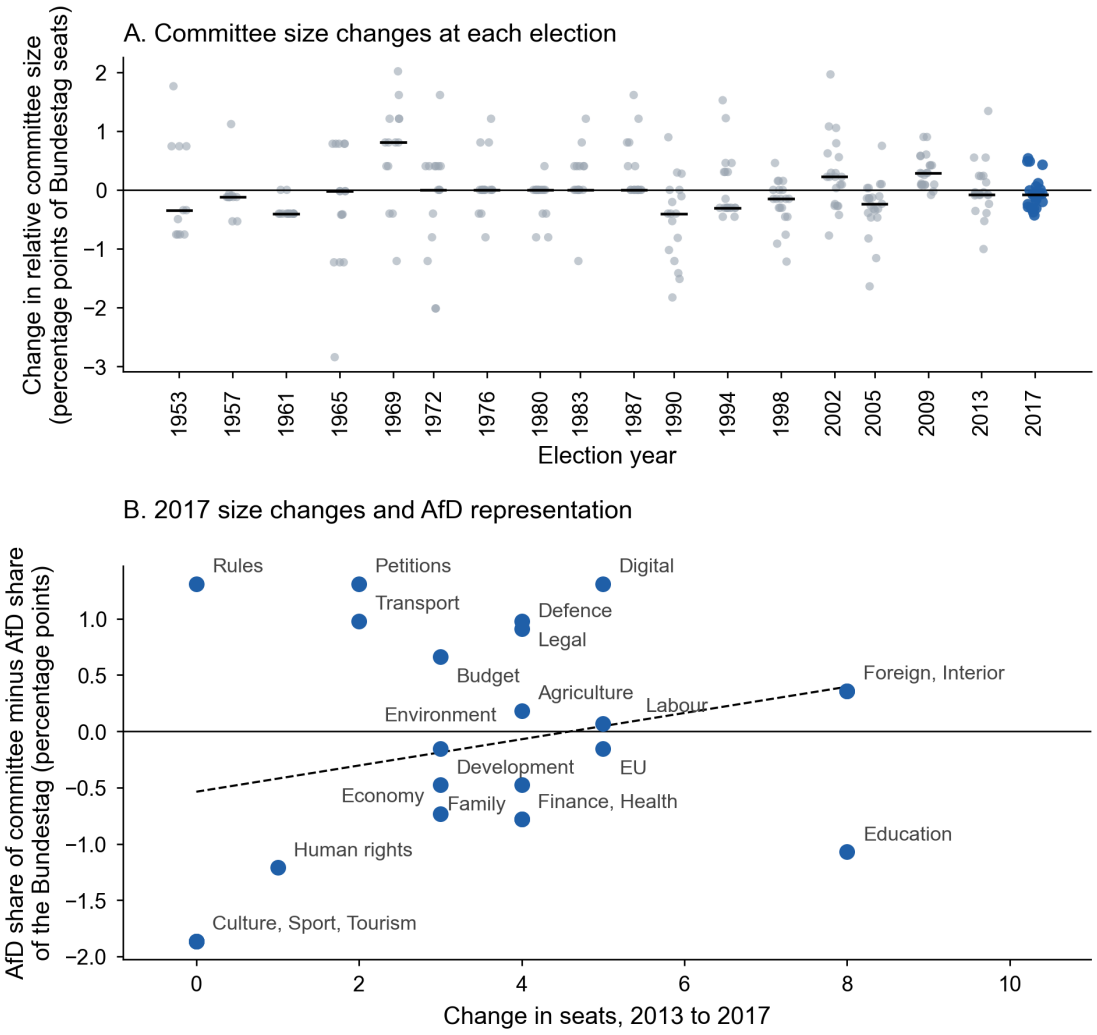
The Bundestag sets the number of seats on each committee anew at the start of every term. Sizes follow mainly the committees' expected workload, although tactical considerations

of the governing majority can play a role (Ismayr 2001, p. 171). The design relies on the 2017 sizes not having been chosen with the AfD's resulting seat share in mind. Figure B1 examines this from two angles.

Panel A places the 2017 size changes in their history. For every standing committee it plots the change in the committee's size, measured relative to the size of the Bundestag, from one term to the next since 1953. The 2017 changes are unremarkable: their mean absolute value is 0.23 percentage points of Bundestag seats, against 0.44 for the changes between 1953 and 2013, and more than a quarter of the historical changes are larger than the largest change in 2017. Most committees grew in absolute terms simply because the Bundestag grew, from 631 to 709 seats.

Panel B asks whether the 2017 changes favoured or disadvantaged the AfD. For the 23 committees that existed in both terms, it plots the change in seats against the AfD's resulting representation, its share of the committee minus its share of the Bundestag (92 of 709 seats, 12.98 percent). The AfD is over-represented in 11 of these committees and under-represented in 12, and the larger a committee's increase, the better the AfD tends to fare ($r = 0.27$), the opposite of what sizing committees against the AfD would produce. A second benchmark keeps each committee's 2013 size relative to the Bundestag and scales it to the new chamber. Against this neutral size, the chosen size gives the AfD a larger share in 12 committees, a smaller share in 6, and the same share in 5. The mean difference is -0.12 percentage points, almost entirely because the committees on culture and media, sport, and tourism kept their 2013 size of 18 seats, which leaves the AfD with 2 seats instead of the 3 it would have received at 20.

FIGURE B1: COMMITTEE SIZES OVER TIME AND THE AFD'S REPRESENTATION IN 2017



Notes: Panel A: change in each standing committee's size relative to the size of the Bundestag (seats on the committee as a percentage of all seats), between consecutive terms, by election year. Committees are matched across terms by their 2018 portfolio; committees without a 2018 counterpart are omitted. Grey: 1953–2013. Blue: 2017. Horizontal bars: medians. Panel B: the 23 committees of the 19th term that existed in the 18th; the committee on housing, created in 2018, has no predecessor. Vertical axis: AfD share of the committee minus the AfD's share of the Bundestag at the constitutive session (92 of 709 seats), in percentage points. Committees with identical values share a label. Dashed line: least-squares fit. Committee sizes 1949–2017 from the data assembled for Esguerra et al. (2023); the 2017 sizes and AfD seats agree with the committee data used for the exposure measure.

B.2 Sample construction

Table A1 reports the progression from the universe of parliamentary recordings to the estimation sample, with separate counts for exclusions due to metadata linkage, unavailable or unusable video, insufficient face coverage, audio quality, transcription failure, and missing committee assignments. Table G3 compares the speeches that meet the estimation-sample restrictions with those that do not.

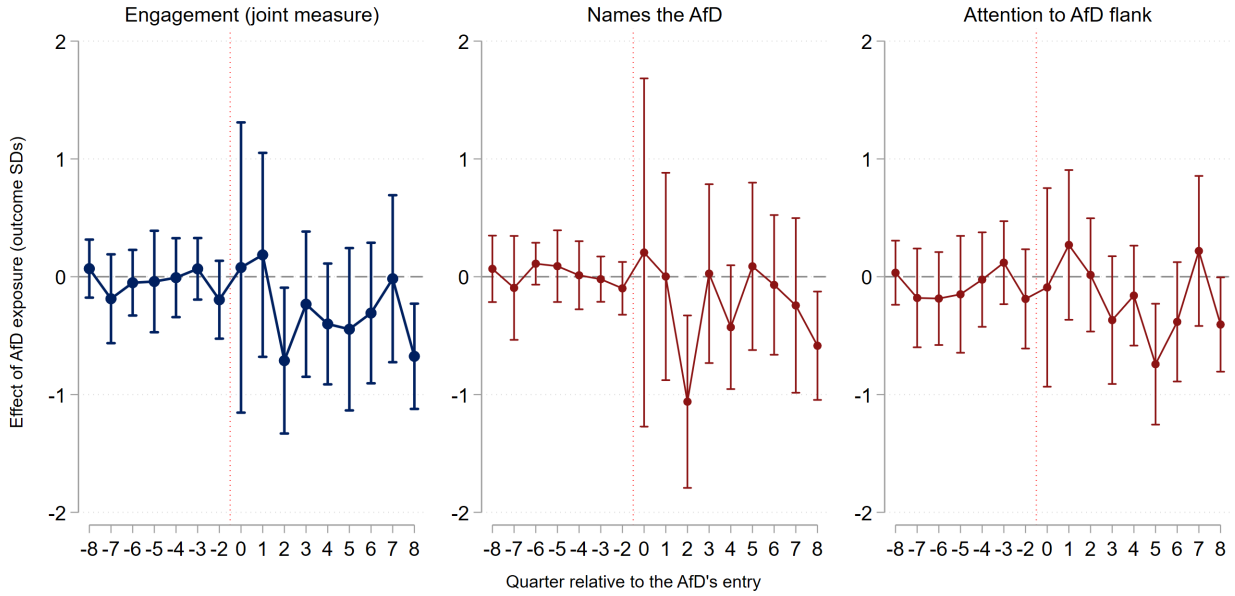
C Additional Identification and Inference Evidence

This appendix reports evidence on pre-entry behavior, the FDP placebo, inference under dependence and multiple testing, and design-based inference, and then asks whether the decline is specific to the AfD and whether it works through the choice of debate. The balance table (Table A2) is descriptive rather than a test of the identifying assumption; the event studies (Figs. A4 and A5) and the placebo (Tables A3 and A18) bear on identification more directly.

C.1 Pre-entry behavior

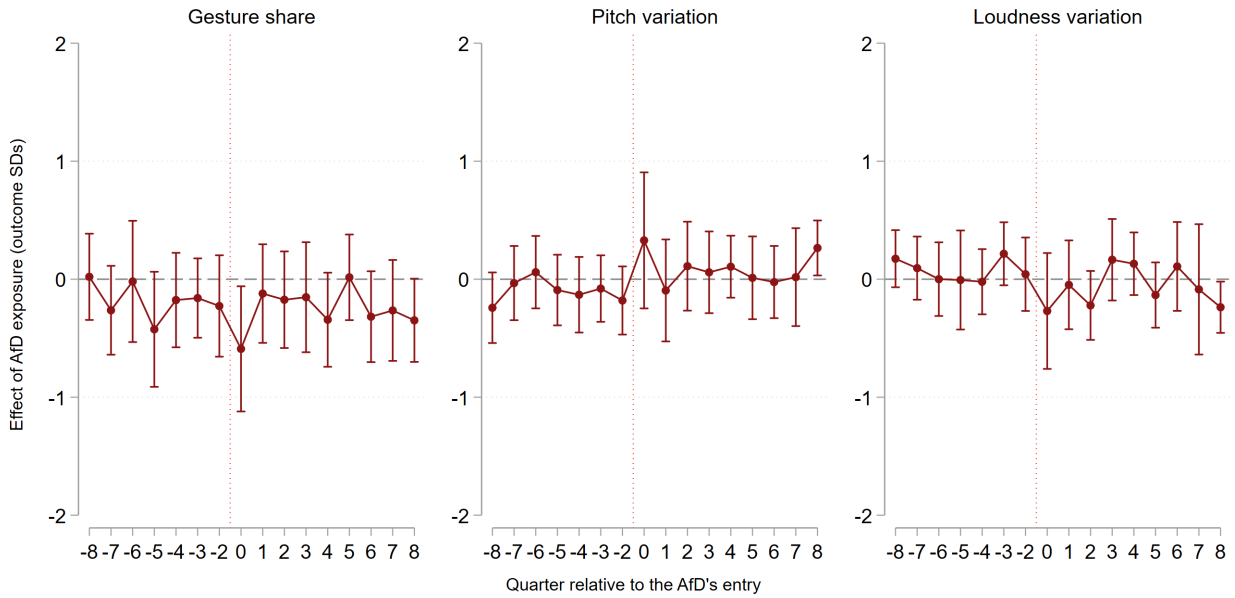
Figures A4 and A5 extend the half-year event study of Fig. 5 to each facet and to the delivery measures, with the joint pre-entry tests in their notes. At quarterly resolution (Figs. C1 and C2) the intervals are wider, because a quarter holds about half as many speeches as a six-month window and the first two post-entry quarters precede the constitution of the committees. The seven pre-entry coefficients are nonetheless jointly indistinguishable from zero for engagement ($p = 0.71$), for both facets ($p = 0.50$ for naming and 0.71 for attention; Table A6) and for the three delivery measures ($p = 0.34$, 0.69 and 0.63). The same holds for convergence toward the AfD's delivery profile ($p = 0.36$) and toward the FDP's ($p = 0.37$; Fig. C3); at half-year resolution the omnibus test on the FDP series rejects ($p = 0.04$), but a linear pre-trend does not ($p = 0.68$) and no individual lead has $|t| > 1$, indicating sensitivity to the specification of pre-entry dynamics. The quarterly estimates are most informative about the absence of a common pre-entry drift rather than about any single lead or lag.

FIGURE C1: EVENT STUDY BY CALENDAR QUARTER: ENGAGEMENT AND ITS FACETS



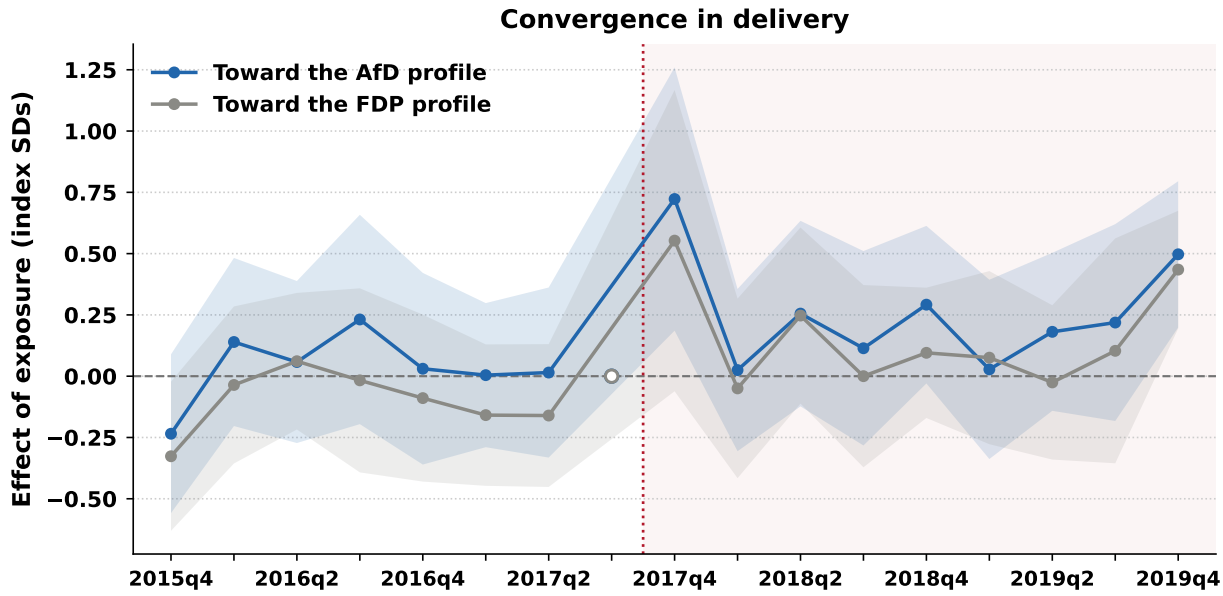
Notes: Interaction of committee AfD exposure with quarter indicators, relative to the quarter before the AfD's entry (omitted), for engagement and its two facets. Outcomes standardized. The first two post-entry quarters hold few speeches before the standing committees were constituted on 31 January 2018, which is why their intervals are wide. Bars are 95 percent confidence intervals from standard errors clustered on the legislator. Table A6 reports the joint tests that the seven pre-entry coefficients are zero.

FIGURE C2: EVENT STUDY BY CALENDAR QUARTER: DELIVERY MEASURES



Notes: Specification of Fig. C1 for gesture share, pitch variation and loudness variation. Joint tests that the seven pre-entry coefficients are zero give $p = 0.34$, 0.69 and 0.63.

FIGURE C3: CONVERGENCE IN DELIVERY, BY CALENDAR QUARTER



Notes: Committee AfD exposure interacted with quarter indicators, relative to the quarter before the AfD's entry, which is the omitted reference and is drawn as a hollow marker. Shading marks the quarters in which the AfD sits in the chamber. Each series projects a speech's three standardized delivery values on the direction from the profile of returning mainstream legislators to the profile of the target party. The FDP returned to the Bundestag in the same election, and its committee seats follow the same allocation rule. Bands are 95 percent confidence intervals from standard errors clustered on the legislator. Joint tests do not reject zero pre-entry coefficients toward either the AfD profile ($p = 0.36$) or the FDP profile ($p = 0.37$).

C.2 The FDP rule placebo

The placebo changes the party while holding fixed the election, the committee-allocation rule and the outcome definitions. For engagement the placebo coefficient is +0.17 (s.e. 0.22; Table A3): positive rather than negative, and indistinguishable from zero. Neither facet declines either. Among the delivery measures, loudness is the exception: its placebo coefficient is positive and significant at the 10 percent level (Table A18). This does not bear on engagement, but it makes an AfD-specific reading of the loudness estimate less secure.

C.3 Dependence and multiple testing

The number of speeches is not the relevant number of independent treatment assignments. Legislators share committees and often hold overlapping portfolios, so no sin-

gle clustering choice fully represents the dependence the allocation rule generates. Tables A13 and A19 therefore place four procedures side by side. Engagement is supported under all four. For its facets the procedures agree on the ordering—naming is the more consistently supported—but differ in the precision they assign to each coefficient, and the redrawn-size randomization is the most demanding of the four.

Multiplicity depends on which hypotheses form a family. Engagement is the single confirmatory hypothesis and needs no adjustment; its wild bootstrap p-value is 0.017. Its two facets, for which the paper makes a common directional claim, form the family of engagement facets, and Holm's correction puts naming at 0.049 and attention at 0.103 (Table A15). The step-down procedure of Romano and Wolf (2005), which builds the adjustment on the bootstrap distribution rather than on the normal p-values, gives 0.049 and 0.106. With 269 clusters the bootstrap stays close to the asymptotic approximation—the unadjusted naming p-value moves only from 0.025 to 0.023—so the size of the family, not the choice of procedure, decides the result. The three delivery measures, for which no common direction is predicted, form the delivery family: pitch and loudness have Benjamini–Hochberg q-values of 0.26 and gesture 0.39. The clearest individual result is therefore verbal, the visual result points the same way with less precision, and the delivery outcomes describe a broader pattern rather than three separately decisive tests.

C.4 Design-based inference

A natural randomization test permutes the twenty-five realized committee shares across committees. That reshuffles the output of the allocation rule rather than its input, and it treats the realized shares as the object that could have come out differently. Because the AfD's share of a committee is a known function of the committee's size, the counterfactuals can instead be generated the way the assignment actually works: redraw committee sizes, apply the Sainte-Laguë/Schepers procedure, and rebuild each legislator's exposure as the mean over the committees they sit on.

I draw each committee's size from the distribution of historical changes in relative committee size. For every standing committee and pair of consecutive terms between 1953 and 2013 I compute the change in the committee's seats as a share of Bundestag seats; this is the distribution plotted in Fig. B1, with 289 observations and a standard deviation of 0.64 percentage points, or roughly four and a half seats in a chamber of 709. In each of 2,000 draws every committee takes its 2013 relative size, receives a change

drawn from that distribution, and is scaled to the 709-seat chamber and rounded; the rule then allocates seats. The two committees created in 2017 without a predecessor keep their realized size in every draw. Exposure rebuilt from committee memberships reproduces the realized treatment to within 1.3×10^{-8}, and the rule reproduces the AfD's seats in all twenty-five committees of the term.

Redrawing sizes is more conservative than permuting realized shares: for engagement it returns $p = 0.04$, against $p = 0.003$ when the realized shares are permuted, and $p = 0.10$ for naming and $p = 0.14$ for attention. These are well above the wild bootstrap's 0.023 and 0.106, because the bootstrap resamples within the realized assignment, while this test asks how often the allocation rule itself would have produced an estimate this large. Table A13 therefore reports the redrawn-size procedure rather than the permutation.

A legislator's exposure is also partly predictable from the portfolio they hold: expected exposure across draws ranges from 12.1 to 13.2 percent, depending on how many committees a legislator sits on and how large they are. Following Borusyak and Hull (2023), I recentre the treatment by that expected value, which removes the component of exposure that any draw would have produced. The recentred engagement coefficient is -0.360 (s.e. 0.138), against -0.415 in Table A5, a reduction of 13 percent: the part of exposure a legislator's portfolio would have produced under any draw accounts for about a seventh of the contrast. Because clustered standard errors rest on an asymptotic approximation in the number of clusters, I apply randomization inference to the recentred estimand, drawing the counterfactuals the same way. It returns $p = 0.08$, and the null distribution is centred at -0.003, which confirms that recentring removes the predictable component. Recentring changes the regressor and not only the variance estimator, so this is a test of the recentred coefficient rather than of the baseline one. For the facets separately, recentred randomization inference returns $p = 0.17$ for naming and $p = 0.21$ for attention.

Three further checks bear on the same question. Dropping each standing committee in turn and re-estimating on the remainder leaves engagement between -0.53 and -0.31 standard deviations, significant at the 10 percent level in all 25 estimates and at 5 percent in 23. Naming stays between -0.52 and -0.23, significant at 10 percent in 24 and at 5 percent in 21; the attention estimate holds at 10 percent in only 7 of 25 and at 5 percent in 2, so it rests on a much smaller set of committees than naming does. Allowing the predetermined characteristics of Table A2 to follow differential trends, by interacting each with the post period, and adding party by quarter and East by quarter fixed effects, leaves

engagement at -0.410 and lowers its standard error from 0.167 to 0.148; naming rises to -0.353 (s.e. 0.138), and under the wild bootstrap the naming specification returns $p = 0.07$. Finally, building exposure only from the committees a legislator held in both terms, which excludes the committees assigned after the AfD's seat counts were known, leaves engagement at -0.270 (s.e. 0.156) and naming at -0.295 (s.e. 0.146), and reduces attention to -0.101 (s.e. 0.152). Table A14 collects these checks.

The engagement estimate keeps its sign in every specification of Table A14, from -0.27 (retained committees only) to -0.42, and the design-based test supports it at the 10 rather than the 5 percent level. The counterfactual distribution of the recentred estimate has a standard deviation of 0.206 against an effect of -0.360: with twenty-five committees and 127 distinct portfolios, the limited variation the allocation rule generates, not the size of the effect, is the binding constraint on precision. Neither facet carries the result on its own.

C.5 Is the decline specific to the AfD?

Exposure could lower how often legislators name the AfD because they are withdrawing from the AfD, or because their speeches become less partisan in general. To separate these I apply the specification of Table A5 to naming each of the other parliamentary groups.

A measurement problem has to be solved first. The production mention rule matches whole tokens, so German compounds—*AfD-Fraktion*, *SPD-Antrag*—go unmatched, and Appendix I repairs this for the AfD only. Comparing a repaired measure for the AfD with unrepaired measures for the others would understate the comparison parties and make the AfD look more distinctive than it is. I therefore apply the same boundary rule to every acronym party. The correction is larger for the comparison parties than for the AfD: speech-level naming rates rise by 25 percent for the AfD, 34 percent for the FDP, 39 percent for the CDU/CSU and 42 percent for the SPD. *Die Linke* and *Bündnis 90/Die Grünen* cannot be repaired by a boundary rule, because their names coincide with ordinary German words, so I use capitalisation, which distinguishes the party noun from the adjective, together with an explicit stop list. A sample of 150 tokens coded by hand without sight of the rule gives a precision of 1.00 and a recall of 0.98 for *Die Linke*, and 0.94 and 1.00 for the Grünen. Coalition colour labels such as *rot-grün* are excluded: in this corpus they refer to the 1998–2005 federal government and to Land coalitions rather than to the Green members of this Bundestag, and the AfD, never having been in a federal coalition, has no

equivalent form. Including them changes the Green estimate from 0.026 to 0.024.

With every party measured the same way, I detect no movement with exposure in naming the CDU/CSU, the SPD or the Grünen, and neither does an indicator for naming any party other than the AfD (-0.034, $p = 0.41$). A general decline in partisan engagement is therefore not what the naming result reflects. One coefficient is nominally significant: naming the FDP falls by 0.110 ($p = 0.05$). Naming *Die Linke* rises by 0.061, but is not distinguishable from zero ($p = 0.20$). Neither survives a Holm adjustment across the five comparison outcomes, where they become 0.24 and 0.82.

The FDP coefficient is similar in magnitude to the AfD's: -0.324 against -0.342 standard deviations. I examine whether correlated treatments account for this pattern. Committee exposure to the AfD and to the FDP correlate at -0.235 across legislators, and in a specification containing both, FDP exposure is null (-0.031, $p = 0.65$) while the AfD coefficient sharpens to -0.121 ($p = 0.02$). The naming outcomes also overlap only partly: the two naming measures correlate at $\phi = 0.19$, and only 29 percent of speeches naming the FDP also name the AfD. The decline in naming therefore extends beyond the AfD as a target. Visual attention discriminates where naming does not: attention to the AfD flank declines (-0.020, $p = 0.10$), while attention to the opposite flank does not ($+0.003$, s.e. 0.003; Table D1).

Newness or stigma? Which property of a target governs the response? Two candidates come from different literatures. The standing a party gains from being engaged may be larger for one the chamber has not lately had to work with, which is Meguid (2005) applied to the party rather than to its issue. The reputational cost of being seen to engage a party beyond the pale (Downs 2001, van Spanje and van der Brug 2007) is a property of *stigma*. The AfD has both properties. The chamber separates them partly: the AfD and the FDP were both absent from the 18th Bundestag and only the AfD carries the stigma, Die Linke carries the stigma and sat in the 18th, and the remaining groups are neither.

Table C2 reports the comparison. Naming falls for both parties absent from the 18th Bundestag (-0.115 for the AfD and -0.110 for the FDP) and for neither of the continuing groups, with Die Linke if anything moving the other way ($+0.061$). Stacking the six groups into one speech-by-party panel with speaker-by-party and quarter-by-party fixed effects, exposure interacted with having been absent from the 18th Bundestag is -0.144 ($p = 0.005$) while exposure interacted with being stigmatised is $+0.027$ ($p = 0.53$), and -0.009 ($p = 0.82$) when absence is left out altogether.

Naming declines for both parties absent from the previous Bundestag, despite their different levels of stigma. This is not novelty in an organisational sense: the FDP has existed since 1948 and has spent more years in federal government than any party other than the CDU/CSU. What it shares with the AfD is that neither was among the colleagues a legislator had worked with in the 18th term. The pattern is more consistent with legislators learning what engaging a party that was not in the chamber the previous term does for that party than with a growing reluctance to be seen engaging a pariah. It does not depend on coding Die Linke as stigmatised, which is arguable: holding absence fixed, the AfD's -0.115 and the FDP's -0.110 differ by 0.005, although only one of the two carries the stigma.

That contrast carries a difference in levels the stacked specification cannot remove. Before entry, 1.8 percent of speeches named the AfD and 2.1 percent named the FDP, against 34.9 to 48.9 percent for the four groups that sat in both terms, so the two coefficients are estimated from a near-zero base and the other four are not. Expressed as a share of each party's own post-entry naming rate, which is the comparison least affected by that difference, naming of the AfD falls by 40 percent and of the FDP by 38 percent, while none of the four continuing groups falls at all. The ordering is therefore not an artifact of the base rates, but the design cannot distinguish a response to parties the legislator had not been working with from a response to parties that are new.

Whose exposure? That comparison varies the target. The allocation rule also varies the treatment, because committee exposure to the FDP is generated the same way, and the two can be crossed. Table C1 reports the four combinations on standardized naming, each treatment scaled to its own least-to-most range. Exposure to the AfD lowers naming of both the AfD and the FDP, and by about the same amount: -0.342 for the AfD and -0.324 for the FDP. The equality test comes from a model that stacks the two targets and carries both exposures at once; entering FDP exposure alongside moves the AfD-exposure cells to -0.359 and -0.306, and the difference between them is 0.053 with a standard error of 0.181 ($p = 0.77$). Exposure to the FDP lowers naming of neither, and the two coefficients are jointly indistinguishable from zero ($F(2, 268) = 0.22$, $p = 0.80$). What generates the decline is therefore working alongside the AfD in particular, and what it reduces is naming of both parties absent from the previous Bundestag rather than of the AfD alone. Only naming is observed here, so this says nothing about visual attention to the FDP.

Entering both exposures together leaves the pattern unchanged: naming the AfD re-

sponds -0.359 to AfD exposure and -0.092 to FDP exposure, naming the FDP -0.306 and $+0.090$. The asymmetry is sharper in the point estimates than in the tests, however. The FDP-exposure coefficients are the less precise, and their equality with the AfD-exposure coefficients comes closer to rejection for the FDP target ($p = 0.10$) than for the AfD target ($p = 0.25$). On the target side the pattern is what the absence reading predicts; on the treatment side the effect comes from the AfD's arrival rather than from the FDP's return.

TABLE C1: EXPOSURE PARTY BY TARGET PARTY, NAMING

	Target party	
Exposure to	Names the AfD	Names the FDP
AfD	-0.342**	-0.324**
	(0.151)	(0.163)
FDP	0.049	0.210
	(0.206)	(0.215)

Notes: Each cell is a separate regression of the standardized naming indicator for the target party on scaled exposure to the exposure party, with legislator and calendar-quarter fixed effects, on the estimation sample. Both treatments are scaled to their own least-to-most contrast: 3.2 percentage points for the AfD, 4.5 for the FDP. Standard errors clustered on the legislator in parentheses; 9,376 speeches and 269 clusters throughout. Only the verbal channel appears here: the FDP holds no angular sector of its own, so there is no attention counterpart (Section K.1). $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

TABLE C2: NEWNESS OR STIGMA?

	Absent from the 18th Bundestag	Stigmatised	Coefficient
A. Naming each group, estimated separately			
AfD	Yes	Yes	-0.115**
			(0.051)
FDP	Yes	No	-0.110**
			(0.055)
Die Linke	No	Yes	0.061
			(0.048)
SPD	No	No	-0.008
			(0.057)
CDU/CSU	No	No	0.023
			(0.061)
Greens	No	No	0.025
			(0.061)
B. Stacked speech-by-party panel			
AfD exposure × absent			-0.144***
			(0.051)
AfD exposure × stigmatised			0.027
			(0.043)
AfD exposure × stigmatised, absence omitted			-0.009
			(0.041)

Notes: Specification of Table A5. Panel A estimates each group's naming indicator separately; Panel B stacks the six groups into one speech-by-party panel with speaker-by-party and quarter-by-party fixed effects, so the interactions are identified off the differential response to exposure. Mentions of each group are measured on the common repaired standard described above. Standard errors clustered on the legislator in parentheses. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

C.6 Agenda composition and the choice of debate

Whether a speech names the AfD depends on what is being debated. I can test this directly. The Mediathek metadata record, for every speech video, the sitting and the agenda item it belongs to, and the video identifiers in the corpus reconstruct exactly: each is the speaker's Bundestag identifier followed by the position of that video among the speaker's own videos, numbered from the most recent, over the window from 22 October 2013 to the end of the 19th term. Matching on that reconstruction and verifying it against the speech date—a field the match does not use— assigns an agenda item to 98.6 percent of the estimation sample, across 2,536 agenda items with a median of three speeches each.

Adding sitting fixed effects leaves the naming estimate at -0.103 ($p = 0.03$). Adding agenda-item fixed effects, so that the comparison runs between legislators speaking in the same debate, lowers it to -0.070 ($p = 0.27$).

Exposure does predict the debates a legislator enters: it raises the AfD's share of a debate's speeches by 0.026 ($p < 0.001$) and the count of AfD speeches in it by 0.232 ($p = 0.013$). But these features of the debate can be controlled for directly. Adding the AfD's share of a debate's speeches leaves the naming estimate at -0.107 ($p = 0.034$); adding the count of AfD speeches leaves it at -0.102 ($p = 0.041$); adding an indicator for the debate being in the top decile of AfD presence, the closest observable proxy for a debate on an AfD motion, leaves it at -0.107 ($p = 0.033$); including the share and the count together gives -0.107 ($p = 0.034$). The baseline on this sample, the 9,248 speeches carrying a debate profile, is -0.101 ($p = 0.043$). None of these controls moves the estimate.

Only conditioning on the debate itself does, and an agenda-item fixed effect absorbs the legislator's choice of which debate to enter along with the agenda's content. That choice responds to the treatment. More-exposed legislators enter debates in which the AfD is more prominent: by 0.37 standard deviations of the AfD's share of a debate's speeches unconditionally ($p < 0.001$), and by 0.18 ($p = 0.06$) holding each legislator's pre-entry topic profile fixed, so about half reflects members continuing with the subjects they already spoke about. I read the smaller figure as movement beyond a member's established subject matter. The size of the debates they enter does not change. The mechanism is close to mechanical: committees prepare the legislation the chamber debates, so the AfD's share of a legislator's committees shapes the AfD's presence in the debates on that legislator's policy area. Topic composition moves the same way. Of 29 topic shares, nine move with exposure at the 5 percent level across debates, against 1.5 expected by chance, but only two do so within a debate. Legislators change which debates they take part in; within a debate they do not change the subject.

An agenda-item fixed effect therefore conditions on a variable the treatment helps determine, and removes a channel of the behavior along with any confounding variation. I read the baseline (-0.115, or -0.101 on the speeches with a debate profile) as the total effect and -0.070 as an alternative estimate that holds the debate fixed. Without further assumptions, the conditioned estimate is not a bound.

D Alternative Outcomes and Specifications

This appendix asks where attention withdrawn from the AfD flank goes, varies the specification, sample and measurement choices behind the estimates, and examines the timing of the response.

D.1 Where the attention goes

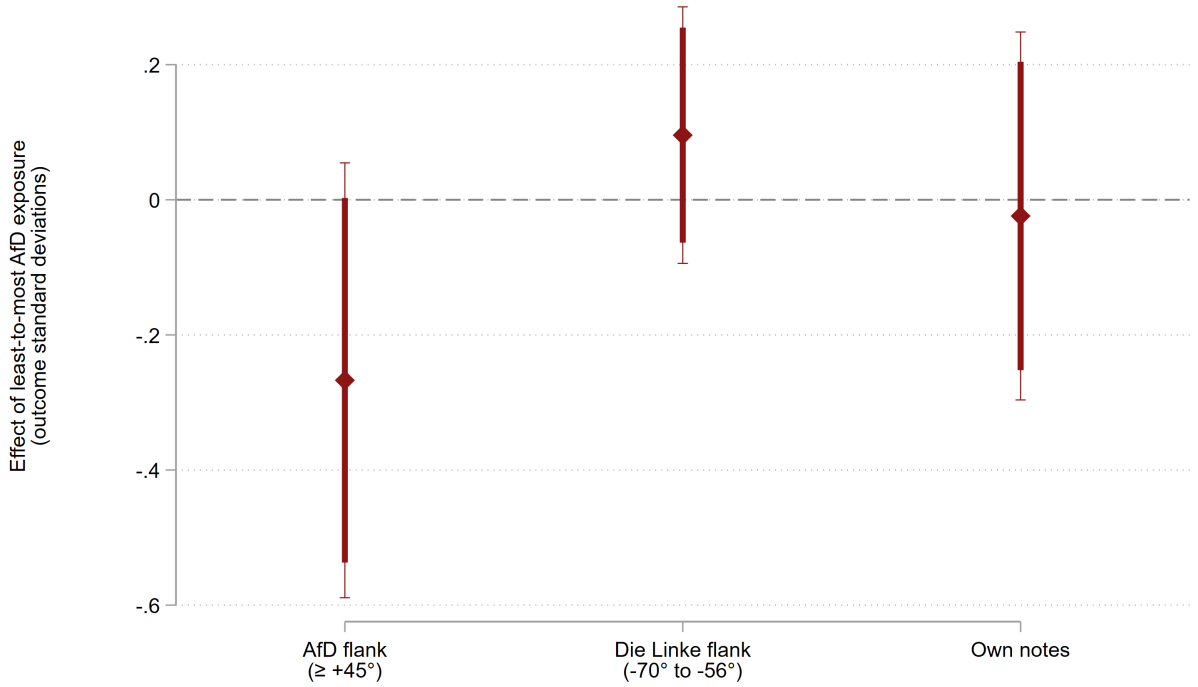
If attention to the far-right benches falls, where does it go? Three destinations are identifiable in these data: the AfD flank, the Die Linke flank at the opposite end of the chamber, and the speaker's own notes. Table D1 and Fig. D1 estimate all three on the same sample and specification.

TABLE D1: WHERE DOES THE ATTENTION GO?

	AfD flank $\geq +45^\circ$ (1)	Die Linke flank $\leq -53^\circ$ (2)	Own notes (3)
AfD exposure × Post	-0.020	0.003	-0.006
	(0.012)	(0.003)	(0.033)
Outcome mean	0.045	0.009	0.527
Legislator FE	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes
Speeches	9,376	9,376	9,376

Notes: Specification as in Table A5. The three columns are the destinations of a speaker's visual attention that these data can identify. The parties seated between the two flanks cannot be separated at this angular resolution and are not estimated. Standard errors in parentheses. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

FIGURE D1: THE ATTENTION BUDGET

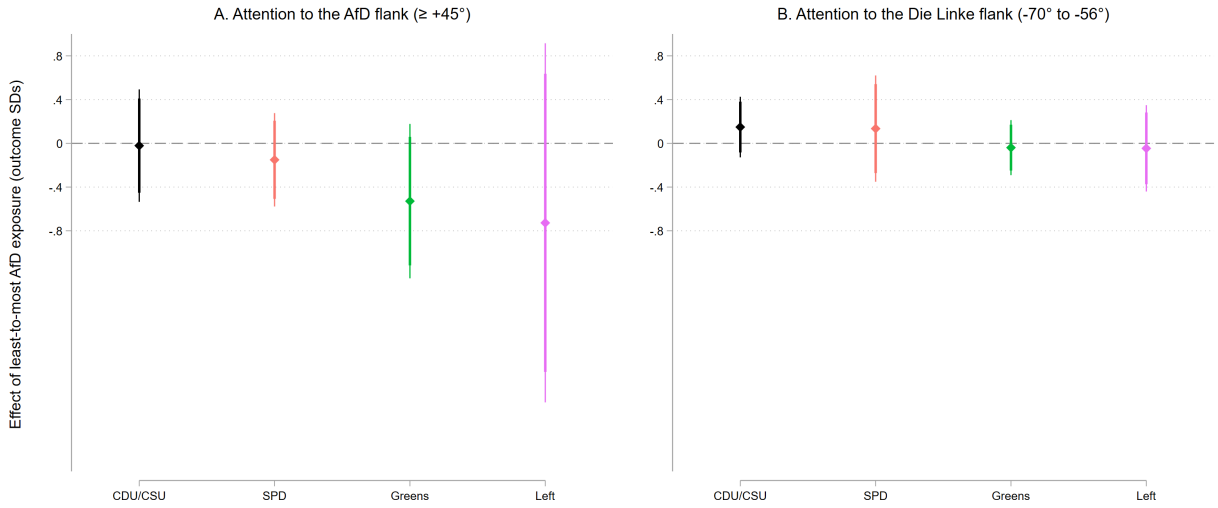


Notes: Coefficients on committee AfD exposure × post for the three identifiable destinations of visual attention, outcomes standardized. Thick and thin bars are 90 and 95 percent confidence intervals.

The attention withdrawn from the AfD flank does not visibly reappear at the opposite flank in the pooled sample. The Die Linke flank coefficient is positive and small, and the notes coefficient is negative and imprecise; neither is distinguishable from zero.

Disaggregating by party, in Fig. D2, suggests two different strategies, although no single party's estimate is precise enough to carry the distinction on its own. CDU/CSU legislators are the group whose attention to the Die Linke flank rises most with exposure (+0.14 standard deviations), and their attention to the AfD flank barely moves. For a CDU/CSU member the AfD sits on their own side of the chamber, so turning away from it means turning toward the opposite side. The point estimates for the Greens and the Left point the other way: their attention to the AfD flank falls by about half a standard deviation or more (-0.52 and -0.74), with no compensating movement elsewhere. This pattern fits the different positions the parties occupy relative to the AfD, but the joint test does not reject equality across parties.

FIGURE D2: ATTENTION TO THE TWO FLANKS, BY PARTY



Notes: Effect of committee AfD exposure × post on attention to the AfD flank ($\geq +45°$, Panel A) and the Die Linke flank ($\leq -53°$, Panel B), estimated separately by party. Colors follow the party convention used throughout. Thick and thin bars are 90 and 95 percent confidence intervals.

D.2 Specification, sample, and measurement robustness

Each exercise varies one feature of the baseline. The specification sweep (Table A7) changes the fixed effects, the speech-length and outcome-availability restrictions, the weighting, and the committee restriction. The remaining tables isolate the speech-length threshold (Table A8), the operationalization of visual attention (Tables A10 and A11), the stable-committee restriction (Table A12), the definition of exposure (Table A9), and controls for committee size and topics (Table A4).

Across the specification sweep and speech-length thresholds, the engagement estimate stays between -0.40 and -0.43. Weighting speeches to equalize speakers leaves engagement unchanged (-0.41) but shifts its composition from naming toward visual attention, while extending the sample to legislators without a stable committee link attenuates it to -0.33. The speech-length floor removes few speeches through 400 words: 9,241 of the 9,384 speeches with no floor survive a 400-word floor, against 9,379 at the paper's 100-word floor. Only at 500 words, when the sample increasingly consists of long prepared speeches, does attention weaken appreciably, while engagement stays at -0.43; this reflects a different mix of speeches rather than a discontinuity at the baseline threshold.

The attention result is not tied to the open-ended sector or to the episode construction. Bounded sectors produce almost the same standardized estimate as the baseline orientation measure; simple word shares are smaller and less precise but retain the same sign. The episode measure is preferable because it treats a sustained turn as one period of directed attention rather than breaking it at brief glances toward notes or momentary failures of pose estimation.

Adding legislators who changed all committees (Table A12) increases the sample from 269 to 440 legislators and lowers engagement from -0.41 to -0.33 without changing its sign, but the effect is concentrated among legislators whose committee environment can be compared across terms: among the changers alone engagement is $+0.14$ and imprecise. This is consistent with the design's logic: for complete changers, the post-entry exposure measure also captures a wholesale change in portfolio. Replacing the AfD share with the number of AfD colleagues (Table A9) lowers engagement by 0.10 standard deviations per additional AfD member, and by 0.25 when committee size is controlled for, although the count and size are sufficiently collinear that those conditional estimates are less precise.

D.3 Dynamics and prior experience

Tables D2 and D3 ask whether the response builds as committee contact accumulates and whether it differs with prior parliamentary experience. Both interactions divide an already limited source of variation and are exploratory.

TABLE D2: DOES THE RESPONSE BUILD OVER THE POST-ENTRY PERIOD?

	Engagement (joint measure) (1)	Names the AfD (2)	Attention to AfD flank (3)
A. First half against second half of the post period			
AfD exposure × Post, quarters 1–5	-0.326*	-0.417**	-0.061
	(0.195)	(0.199)	(0.175)
AfD exposure × Post, quarters 6–10	-0.472**	-0.293*	-0.399**
	(0.183)	(0.168)	(0.182)
p (equal effects)	0.402	0.540	0.023
B. Linear trend in the treatment effect			
AfD exposure × Post	-0.179	-0.288	0.025
	(0.264)	(0.275)	(0.216)
× Quarters since entry	-0.044	-0.010	-0.055*
	(0.036)	(0.039)	(0.029)
Legislator FE	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes
Speeches	9,376	9,376	9,376

Notes: Specification of Table A5 with the treatment split by time since the AfD's entry. Panel A interacts it with the first five and the last five post-entry quarters (2017Q4–2018Q4 and 2019Q1–2020Q1); the *p* row tests their equality. Panel B keeps the treatment and adds its interaction with the number of quarters since entry, so the second row is the change in the effect per quarter. Outcomes in standard deviations, standard errors clustered on the legislator. A cost that exposure scales from the moment the AfD arrives implies a level shift; beliefs that accumulate through committee contact imply a build.

TABLE D3: EXPERIENCE AT THE START OF THE TERM

	Engagement (joint measure) (1)	Names the AfD (2)	Attention to AfD flank (3)
A. Split at the median of prior terms served			
AfD exposure × Post, at most two prior terms	-0.419**	-0.270	-0.345
	(0.210)	(0.166)	(0.215)
AfD exposure × Post, more than two prior terms	-0.425	-0.496	-0.128
	(0.268)	(0.327)	(0.213)
p (equal effects)	0.986	0.538	0.474
B. Years of service at term entry, continuous			
AfD exposure × Post	-0.360	-0.147	-0.381
	(0.323)	(0.317)	(0.319)
× Years served at entry	-0.007	-0.022	0.012
	(0.031)	(0.038)	(0.028)
Legislator FE	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes
Speeches	9,376	9,376	9,376

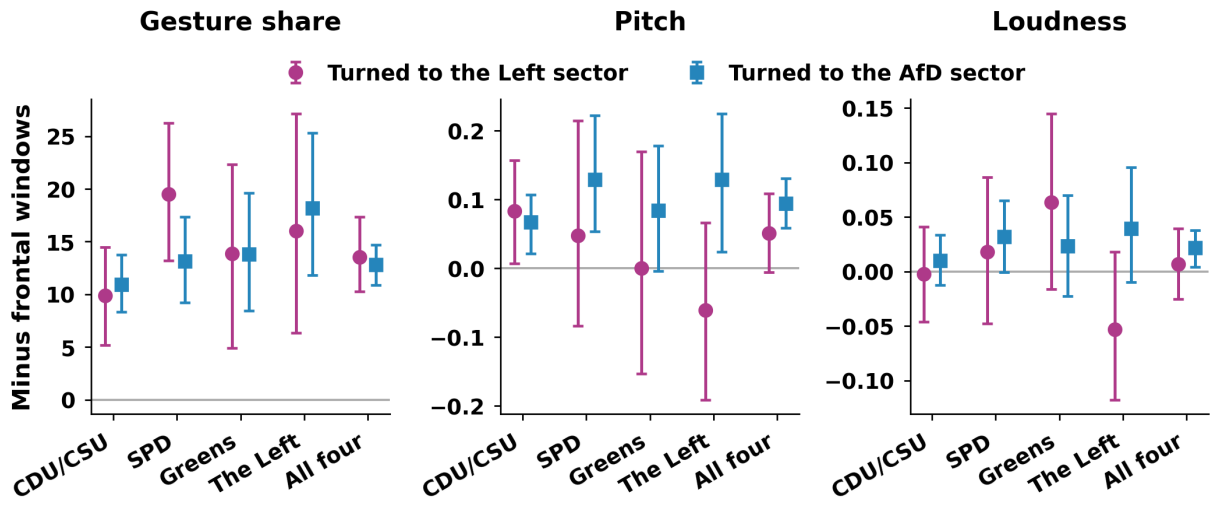
Notes: Specification of Table A5 interacted with the legislator's Bundestag experience at the start of the 19th term, measured from the official Stammdaten and therefore fixed before any exposure is realized. Panel A splits at the sample median of two prior terms and includes the main effect of the less-experienced group interacted with the post period; the p row tests equality. Panel B uses years of service at term entry continuously. The estimation sample contains no first-term legislators, since the committee restriction requires service in both terms. Standard errors clustered on the legislator.

For engagement the time path is closer to a level shift than to a steadily accumulating response: the effect is -0.33 in the first five post-entry quarters and -0.47 in the last five, and the two are not distinguishable ($p = 0.40$). Its composition shifts, however. Naming responds from the start, while visual attention becomes more negative only in the second half of the post-entry period ($p = 0.02$ for equal effects). Prior experience does not change the engagement response ($p = 0.99$ for equal effects across the median split).

D.4 Visual diagnostics

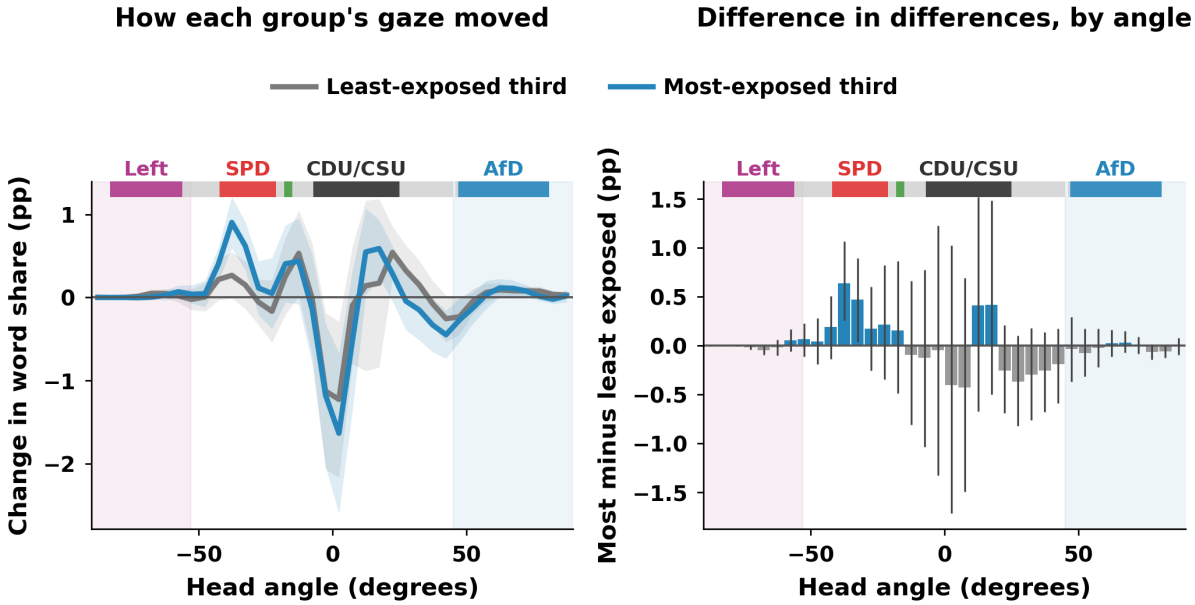
Figure D3 compares delivery within the same speech when a speaker turns to either flank, and Fig. D4 plots the change in the full distribution of head angles by exposure tercile. Neither replaces the fixed-effects estimates; they show what a turn toward a flank looks like in the underlying data and where in the chamber the shift occurs.

FIGURE D3: DELIVERY WHEN TURNING TO A FLANK



Notes: Mainstream speakers after the AfD's entry. Five-second windows of a speech in which at least half of the words with an observed angle fall in the AfD sector ($\geq +45°$) or the Left sector ($\leq -53°$), each compared with windows of the same speech with at most ten percent in either flank. The vertical axis is a difference in the panel's own units: percentage points of frames containing a visible gesture in the left panel, and within-speech robust z-scores of the word-level measure in the centre and right panels, so that pitch and loudness are expressed relative to the speaker's own range within the same speech. Speech differences averaged within speaker, 95 percent speaker bootstrap.

FIGURE D4: WHERE THE GAZE MOVED, BY COMMITTEE EXPOSURE



Notes: Mainstream legislators observed with head pose in both terms, grouped into thirds by committee AfD exposure. The horizontal axis of both panels is the speaker's horizontal head angle in degrees, positive toward the AfD benches and negative toward the Left. Left: change in each group's distribution of word-level head angles from the 18th to the 19th term, in percentage points of words, legislators weighted equally. Right: the most- minus the least-exposed third's change, with 95 percent speaker-bootstrap intervals. A descriptive picture of the design, without fixed effects.

Facing a flank is accompanied by changes in delivery, one reason not to read gesture and voice as independent psychological readouts. Relative to the least exposed, the most exposed legislators' gaze moves away from the right of the chamber and toward the centre-left. The angle-by-angle intervals are wide, so the plot is consistent with the sector estimate rather than a second estimate of its size.

E Selection into Speaking and Observation

The regressions condition on a legislator taking the floor and on the speech supplying usable multimodal data. This appendix examines both margins.

E.1 Taking the floor

The estimates above concern conduct within speeches. More-exposed legislators also give fewer speeches. Table E1 uses a balanced panel of 270 legislators over the 26 quarters from 2013q4 to 2020q1, in which a quarter without a speech counts as zero. The panel is built by collapsing the speech data before the singleton legislator that the speech-level regressions drop is removed, so it carries one legislator more than the 269 of Table A5. Moving from the least- to the most-exposed portfolio is associated with 0.57 fewer speeches per quarter and a 14 percentage point lower probability of speaking at all in a given quarter. The association is specific to the AfD: FDP exposure, allocated by the same rule, gives $+0.003$ speeches per quarter ($p = 0.99$), and the AfD coefficient strengthens when both are included. Speaking less can itself be a way of engaging the AfD less, but the parliamentary groups allocate speaking slots (Proksch and Slapin 2012, 2015), so it is not chosen the way naming and orientation are. I therefore treat it as a margin of selection rather than as a response the design identifies.

TABLE E1: DOES EXPOSURE CHANGE WHO SPEAKS?

	Speeches per quarter (1)	Spoke at all (0/1) (2)
AfD exposure × Post	-0.572***	-0.144**
	(0.187)	(0.067)
Legislator FE	Yes	Yes
Quarter FE	Yes	Yes
Legislator-quarters	7,020	7,020

Notes: Balanced legislator-by-quarter panel of the pre-singleton estimation roster (270 legislators, one more than the 269 of Table A5, as explained in the text); a quarter without a speech is a zero. Legislator and quarter fixed effects; standard errors clustered on the legislator. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

E.2 Selection into the estimation sample

I detect no relationship between exposure and retention under the multimodal requirements. Conditional on a speech, the estimates show no significant association with entry into the estimation sample or the availability of frontal footage and gesture classifications (Table E2); retention is 96.54 percent among the most exposed against 96.51 percent among the least. This speech-level retention check does not imply equal pose cover-

age within retained speeches; Section K.1 documents lower within-speech coverage with greater exposure and the corresponding denominator sensitivity checks.

TABLE E2: SELECTION INTO THE ESTIMATION SAMPLE

	In estimation sample (1)	Usable frontal footage (2)	Usable gesture data (3)
AfD exposure × Post	-0.004	0.014	0.021
	(0.016)	(0.022)	(0.024)
Legislator FE	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes
Speeches	13,336	13,336	13,336

Notes: All mainstream speeches by the estimation sample's legislators, before the multimodal restrictions (13,336 speeches). Each column is a linear probability model of the indicated outcome on committee AfD exposure × post, with legislator and calendar-quarter fixed effects as in Table A5: (1) the speech enters the estimation sample; (2) usable frontal footage of the speaker exists; (3) usable gesture classifications exist. Standard errors clustered on the legislator in parentheses. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

E.3 Bounds for selection into speaking

The margin that binds is speaking itself: the speeches observed after entry are selected by a behavior correlated with the treatment. Table E3 bounds the engagement estimate and its two components following Lee (2009). The procedure requires a binary treatment and no fixed effects, so it compares legislators above and below median exposure in a legislator-by-quarter panel, with each outcome measured against the legislator's own pre-entry mean, and it trims the group observed more often by 5.7 percent. Among quarters with a speech, engagement is 0.155 standard deviations lower above the median, and the estimated bounds run from -0.237 to -0.024: even under the least favorable selection the data allow, the point estimate stays below zero. The upper bound is imprecise (s.e. 0.098), however, and a confidence interval around the bounds would include zero, so the bounds do not establish a decline on their own. For the components, the share of speeches naming the AfD is 3.7 percentage points lower above the median, with bounds from -5.7 to $+0.6$ percentage points, and attention to the AfD flank is -0.009, with bounds from -0.014 to 0.000. Both ranges include zero, but neither allows exposure to raise the outcome appreciably.

The bounds allow selection to operate in the least favorable way consistent with the observed difference in speaking rates and the monotonicity assumption. This exercise

uses a binary exposure comparison rather than the continuous treatment in the main design. A related concern is weighting: more-exposed legislators contribute fewer speeches and so carry less weight in the speech-level estimate. Collapsing to one observation per legislator and period, so that every legislator counts equally, leaves engagement at -0.41 ($p = 0.014$).

TABLE E3: BOUNDS FOR SELECTION INTO SPEAKING

	Among quarters	Lee bounds	
Outcome	with a speech	Lower	Upper
Engagement (joint measure)	-0.155	-0.237	-0.024
	(0.073)	(0.084)	(0.098)
Names the AfD	-0.037	-0.057	0.006
	(0.023)	(0.026)	(0.038)
Attention to AfD flank	-0.009	-0.014	0.000
	(0.005)	(0.006)	(0.006)
Trimming proportion	0.057		
Legislator-quarters (with a speech)	2,620 (1,682)		

Notes: Legislator-by-quarter panel of the estimation sample's legislators after the AfD's entry. Outcome: the legislator's quarterly mean minus their own mean before the entry. Treatment: exposure above that of the median legislator. A quarter without a speech is not observed. Engagement is the joint measure in standard deviations; its two components are the share of speeches naming the AfD and the share of aligned words assigned to sustained orientation. First column: difference among quarters with a speech; bounds following Lee (2009), trimming the group that speaks more often. Bootstrap standard errors clustered on the legislator. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

F Interpretation and Heterogeneity

This appendix asks whether sustained exposure moderates the immediate response to an AfD speech, how the competition result depends on the measure of competition, and whether the effect differs across parties. In each case the moderator is not assigned by the allocation rule; only the exposure term is.

F.1 Does sustained exposure change the immediate response?

The immediate orienting response is similar above and below the median of sustained exposure (Table A16): the equality test for visual attention gives $p = 0.70$. Sustained

exposure therefore does not appear to eliminate the situational response to an AfD speech. The drop in naming after an AfD speech is larger among more-exposed legislators, but the difference is imprecise ($p = 0.44$). Only the pitch interaction is significant, and the split is coarse while the speaking-order comparison is not randomly assigned. I therefore do not detect the weakening of the immediate reaction that habituation would predict; with a standard error of 0.213 on an estimate of 0.090, the interval includes attenuation of more than half. Table A17 reports mean pitch relative to each legislator's own baseline. It falls slightly with sustained exposure and falls clearly right after an AfD speech, so neither form of exposure makes legislators sound more agitated overall.

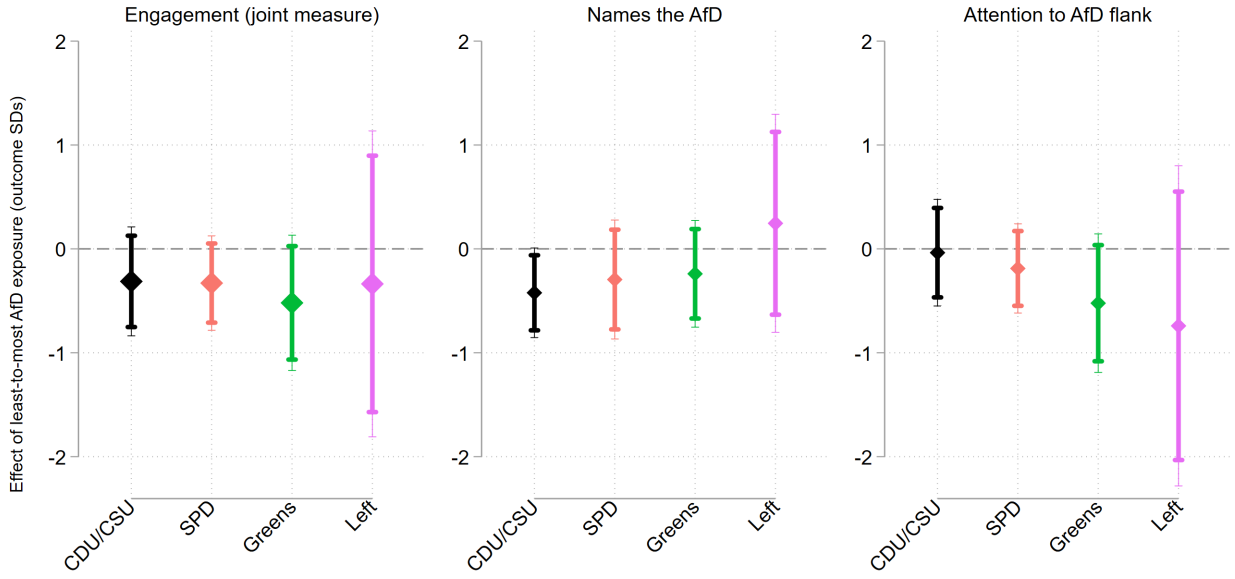
F.2 Electoral competition

The positive interaction for naming is stable when East–West differences are entered at the same order (0.31, $p = 0.04$; Table A21). It describes attenuation of the negative naming effect, not an established positive effect: one standard deviation above mean competition, the implied effect is -0.06 ($p = 0.80$). The orientation effect at that value is -0.41 ($p = 0.124$). The difference between the orientation and naming interactions remains significant (-0.49, s.e. 0.21, $p = 0.019$). When the AfD's constituency vote share replaces the own-party vote gap, the naming interaction falls to 0.04 and is indistinguishable from zero, while the orientation interaction remains negative and imprecise (-0.34, $p = 0.13$; Table A22). None of these specifications isolates electoral competition from other constituency characteristics.

F.3 Party and government–opposition heterogeneity

Figure F1 and Table F1 report the exposure effect by party. They do not show distinct party effects: equality across parties is not rejected for engagement ($p = 0.96$), naming ($p = 0.70$) or visual attention ($p = 0.62$), although the point estimates place the largest decline in attention among the Greens and the Left. A government–opposition split gives an engagement coefficient of -0.48 standard deviations among opposition legislators and -0.31 among the governing parties, and an attention coefficient of -0.58 against one close to zero; neither difference is precisely estimated (Table F2). This fits a stronger response among parties that compete with the AfD for the opposition role, but the data cannot establish it.

FIGURE F1: EXPOSURE ESTIMATES BY PARLIAMENTARY GROUP



Notes: Implied effect of committee AfD exposure × post by party on engagement and its two facets, from the pooled interaction model of Table F1; outcomes standardized so the panels share a scale. Colors follow the party convention used throughout. Thick and thin bars are 90 and 95 percent confidence intervals.

TABLE F1: PARTY HETEROGENEITY, FULL INTERACTION MODEL

	Engagement (joint measure) (1)	Names the AfD (2)	Attention to AfD flank (3)
AfD exposure × Post (CDU/CSU)	-0.313	-0.423*	-0.036
	(0.266)	(0.219)	(0.261)
× SPD	-0.016	0.128	-0.152
	(0.351)	(0.365)	(0.338)
× Greens	-0.207	0.183	-0.486
	(0.424)	(0.339)	(0.428)
× Left	-0.024	0.669	-0.704
	(0.794)	(0.578)	(0.824)
p (equal across parties)	0.963	0.704	0.625
Legislator FE	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes
Speeches	9,376	9,376	9,376

Notes: Pooled model with party-specific exposure effects and party-specific post-period shifts. The first row is the effect for the CDU/CSU; the SPD, Greens and Left rows are *differences* from the CDU/CSU effect, not party effects. The implied party effects on engagement are -0.31 (CDU/CSU), -0.33 (SPD), -0.52 (Greens) and -0.34 (Left); on attention to the AfD flank they are -0.04 (CDU/CSU), -0.19 (SPD), -0.52 (Greens) and -0.74 (Left); on naming, -0.42, -0.30, -0.24 and $+0.25$. The p row tests that all three differences are zero. Outcomes standardized. Standard errors in parentheses. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

TABLE F2: GOVERNMENT VERSUS OPPOSITION

	Engagement (joint measure) (1)	Names the AfD (2)	Attention to AfD flank (3)
AfD exposure × Post (opposition)	-0.477	-0.119	-0.582*
	(0.312)	(0.243)	(0.322)
Government × Post	-0.389	1.289	-1.860
	(1.477)	(1.239)	(1.481)
AfD exposure × Post × Government	0.168	-0.237	0.485
	(0.362)	(0.300)	(0.368)
Legislator FE	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes
Speeches	9,376	9,376	9,376

Notes: The first row is the effect among opposition legislators (Greens and Left); the triple interaction is the difference for the governing parties (CDU/CSU and SPD), whose implied effects are -0.31 on engagement and -0.10 on attention to the AfD flank. Outcomes standardized. Standard errors in parentheses.
$^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

G A New Party in the Chamber: Descriptive Evidence

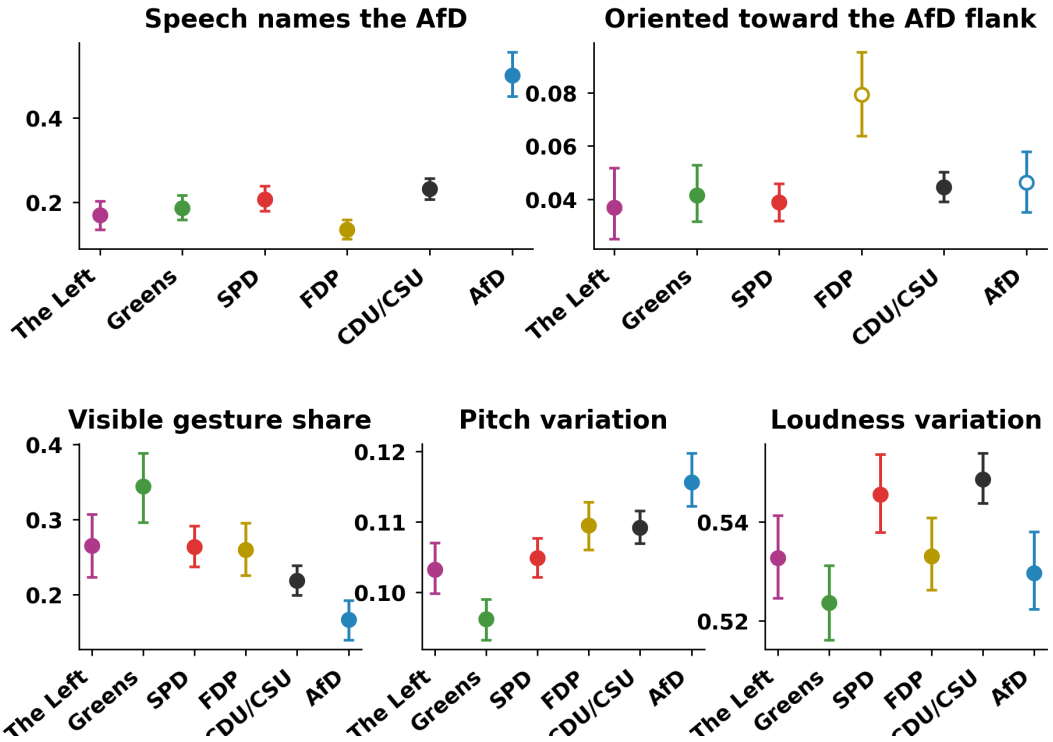
This appendix uses the full corpus to describe how the AfD behaves in the plenary, whether that changes over time, and how the other parties receive it. It also documents the geometry behind the attention measures and places the estimation sample in the corpus. None of the comparisons uses the allocation rule. Unless noted otherwise, they use every speech of at least 100 words by all parties in the 19th Bundestag up to 13 March 2020, weight legislators equally, and report 95 percent intervals from a bootstrap clustered on the legislator.

G.1 How the AfD speaks

Figure G1 compares the five outcomes across parliamentary groups. The AfD is distinctive on some channels and unremarkable on others. It names itself in half of its speeches, gestures least of all groups (a visible gesture share of 0.17, against 0.34 for the Greens) and shows the highest pitch variation; its loudness variation is lower than that of the four mainstream parties and similar to the FDP's. Orientation toward the AfD flank hardly

separates the mainstream parties. It is highest for the FDP and the AfD themselves, whose own or neighbouring benches lie in that sector, which is why the paper never reads that measure as attention to the AfD for those two groups. Table G1 reports the delivery profiles on the speeches with usable footage and gesture data, in standard deviations of the estimation sample, and Table A20 the convergence estimates built from them.

FIGURE G1: PARTY PROFILES IN THE 19TH BUNDESTAG



Notes: Speeches of at least 100 words, 24 October 2017 to 13 March 2020. Speaker-weighted means with 95 percent speaker-bootstrap intervals. Open markers: the speaker's own (AfD) or adjacent (FDP) group sits in the AfD flank sector.

TABLE G1: DELIVERY PROFILES IN THE 19TH BUNDESTAG

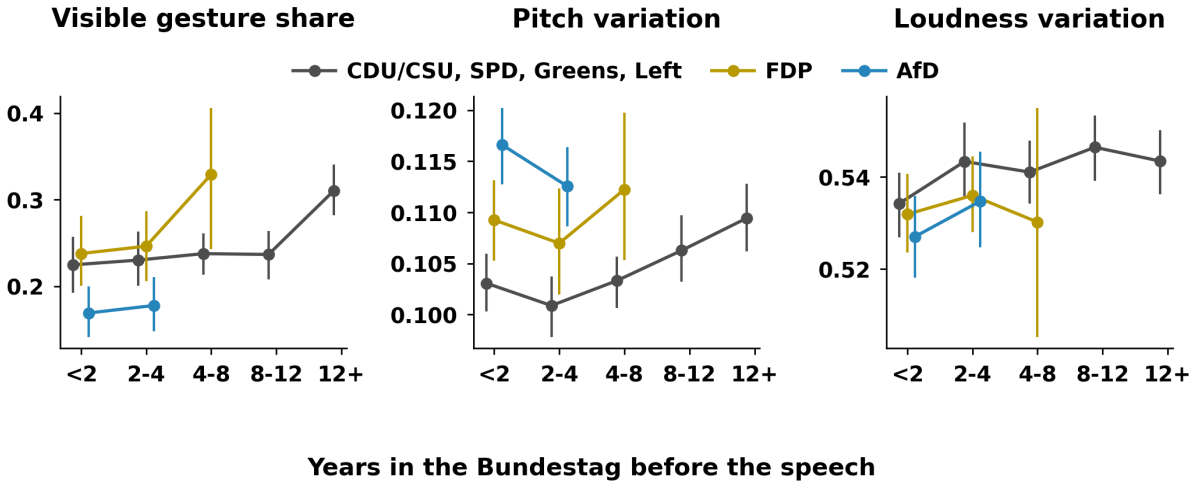
	Gesture share	Pitch variation	Loudness variation	Speakers
AfD	-0.45	0.57	-0.64	87
FDP	0.02	0.26	-0.60	78
Mainstream, first term	-0.12	-0.08	-0.54	112
Mainstream, returning	0.05	0.03	-0.48	403

Notes: Speeches of at least 100 words with usable footage and gesture data, 24 October 2017 to 13 March 2020. Each speaker's mean, then the mean over speakers, in standard deviations of the estimation sample. First-term and returning mainstream legislators are classified from the Bundestag's service records.

Party means mix conduct with composition, and the AfD's composition is unusual: 91 of its 92 speakers in the window were in their first Bundestag term. Figure G2 relates delivery to Bundestag experience, measured from the official service records as time in the chamber before each speech. Pitch variation rises with experience among mainstream legislators, and those with more than twelve years in the chamber gesture markedly more than everyone else. The AfD's first-term members nonetheless show higher pitch variation than mainstream members at any level of experience.

The gesture gap is, in good part, composition. First-term CDU/CSU legislators gesture no more than first-term AfD legislators (0.17 each). Holding gender, speech length, quarter, Bundestag experience and age fixed, the gap between the AfD and the CDU/CSU, SPD and Left is no longer distinguishable from zero; only the Greens (by 0.12) and the FDP (by 0.07) still gesture significantly more. The AfD's high pitch variation survives the same adjustment, and the gaps to the other groups grow slightly. Once its members' inexperience is taken into account, the AfD's delivery is distinctive in pitch but not in gesture.

FIGURE G2: DELIVERY AND BUNDESTAG EXPERIENCE

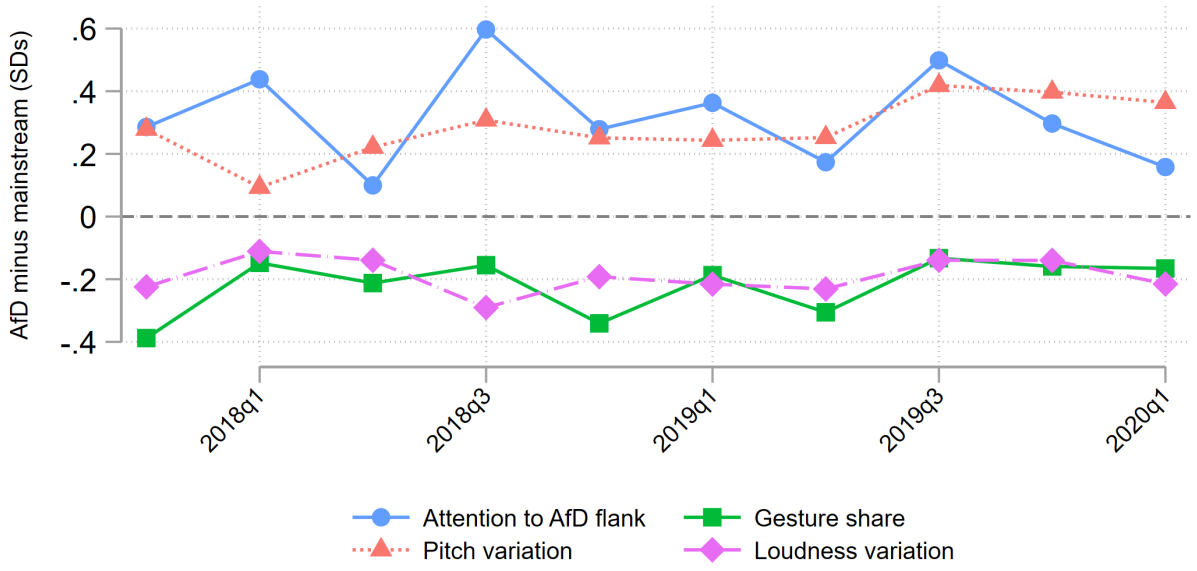


Notes: After the AfD's entry. Bundestag experience is cumulative membership before the speech date from the Bundestag's official service records (*Stammdaten*), excluding gaps. Speaker-weighted means within service bins with 95 percent speaker-bootstrap intervals; bins with fewer than five speakers omitted.

G.2 Does the AfD adapt?

Figure G3 follows the gap between the AfD and the mainstream parties over the ten quarters of the post-entry window. On gesture the gap narrows substantially, from -0.35 to -0.13 standard deviations, as the AfD's members gain experience. On pitch variation it widens, from 0.28 to 0.36. Attention and loudness show no clear trend. The gesture gap narrows as AfD members gain experience, while their higher pitch variation persists.

FIGURE G3: DOES THE GAP BETWEEN THE AFD AND THE MAINSTREAM CLOSE?



Notes: The AfD's quarterly mean minus the mainstream parties' quarterly mean, in corpus standard deviations, over the post-entry window. A series moving toward zero indicates convergence.

G.3 How the chamber receives it

Two margins of engagement are recorded in the plenary protocol and need no video. The first is whether a speaker lets another member put an interjection question (*Zwischenfrage*), which the speaker is free to refuse. I identify every request and its outcome in the protocols of all speaking turns (Appendix J). Panel A of Fig. A1 shows that speakers grant 45 percent of requests from the AfD, against 70 percent of requests from the other opposition parties. Among requests received by the same legislator, an AfD request is 22 percentage points less likely to be granted (standard error 5 points). The gap is largest on the left of the chamber: the Left grants 25 percent of AfD requests and 83 percent of other requests, the Greens 33 and 81 percent, the SPD 29 and 63 percent, the CDU/CSU 63 and 70 percent. Refusal of AfD requests does not vary with committee exposure (Table G2), so it is best read as a norm of the chamber as a whole.

The second margin is heckling. Panel B of Fig. A1 counts the interjections (*Zurufe*) the protocol attributes to each group, per 100 speaking turns of the group at the lectern. AfD speeches draw the most heckling of any group, above all from the SPD (115 per 100 turns) and the Greens (106), and the AfD in turn heckles the SPD (87) and the CDU/CSU (69)

most. Ash, Krümmel, and Slapin (2025) use the same recorded reactions across German state parliaments to study how audiences respond to who is speaking. The established parties argue with the AfD from their seats while often denying it the floor. Together, these comparisons document distinctive delivery and differential treatment of the AfD in plenary debate.

TABLE G2: GRANTING INTERJECTION REQUESTS AND COMMITTEE EXPOSURE

	Request granted	
	(1)	(2)
Request from the AfD	-0.193***	-0.217***
	(0.033)	(0.037)
× AfD exposure		-0.053
		(0.172)
Share granted, other requests	0.604	0.600
Legislator FE	Yes	Yes
Requests	1,238	1,040

Notes: 19th Bundestag, interjection requests from the AfD and the other opposition parties to speakers outside the AfD. Linear probability model of the request being granted, with speaker fixed effects; standard errors clustered by speaker. Exposure is scaled as in Table A5. Appendix J describes how requests are identified. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

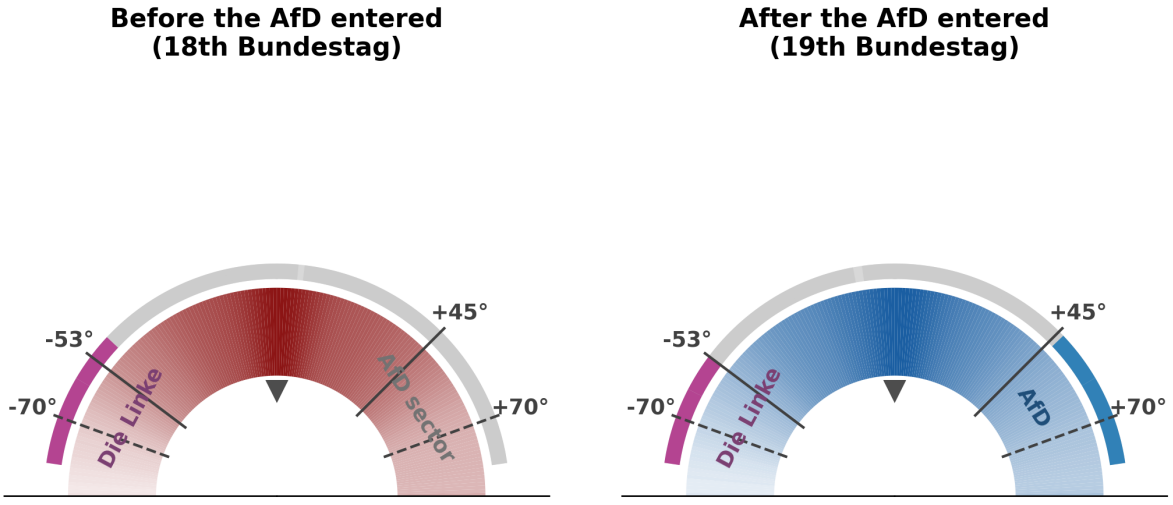
G.4 What head orientation can and cannot identify

The attention measures rest on a geometric fact: a speaker at the lectern who turns toward a group's benches points the head in a direction that a horizontal angle records. Figure A3 shows how far that fact carries. It draws the chamber of each term as the speaker sees it, with every seat in its row, and marks the sectors the paper reads. Each group holds a contiguous stretch of angle, and between the stretches lie directions in which two groups are both in view, because a speaker sees the near rows of one and the far rows of the next. Those transitions are wide: about twelve degrees between the Left and the SPD, and sixteen between the FDP and the AfD. Only beyond about $+62^{\circ}$ does a speaker face nothing but AfD seats, and beyond about -66° nothing but Left seats. The sectors this paper uses open well inside those limits, at $+45^{\circ}$ and -53°, where the flank group's benches first come into view, and also include seats of the neighbouring group. What makes them usable is that a turn that far out is attributable, which the speaking record confirms: gaze beyond about $+46^{\circ}$ is more likely to follow a naming of the AfD than of the FDP. In the

middle of the chamber the groups are separable on paper, the Greens holding some ten degrees to themselves, but no sector there answers to a target the theory names, and with a head-pose model that errs by close to four degrees on average (Hempel, Abdelrahman, and Al-Hamadi 2022) the narrower bands would not survive. I mark the approximate seating in every figure that shows head angles, for orientation, but interpret orientation only at the two flanks.

Figure G4 turns the full corpus into a map of the chamber: every degree as seen from the lectern, shaded by the share of word-level measurements taken in that direction, before the AfD's entry and after it. It shows that attention is overwhelmingly concentrated straight ahead: the modal speaker looks at the chamber in front of them and at their notes, and the flanks are thin tails of the distribution. The orientation outcomes measure these infrequent turns, which is why they are measured as shares of a speech rather than as a typical angle. Moreover, the distribution is markedly asymmetric even before the AfD entered the Bundestag, with more mass to the speaker's right than left. The largest parliamentary group, the CDU/CSU, sits on that side.

FIGURE G4: WHERE SPEAKERS LOOK: THE CHAMBER BY ANGLE



Notes: Every degree of the chamber gets a cell of equal size; colour carries the share of word-level head-pose measurements taken at that angle. Mainstream speakers only, 12.6 million measurements, 22 October 2013 to 13 March 2020. Both panels share one colour scale, compressed as a fourth root because attention is so concentrated straight ahead that a linear scale renders the flanks invisible; shading therefore orders angles and should not be read as a magnitude. Solid rays mark where each flank sector opens, $+45°$ and $-53°$, the angles at which that group's benches first come into view; dashed rays mark the bounded versions, $+70°$ and $-70°$. The outer ring indicates the flank areas for Die Linke and AfD. It breaks where no one sits: at either end, because the benches stop at $\pm 81.7°$ as seen from the lectern rather than at $\pm 90°$, and once near the centre at the aisle between the Greens and the CDU/CSU blocks, which runs from $+5.4°$ to $+6.9°$ in the 18th term and from $-10.4°$ to $-8.1°$ in the 19th, the shift following the reallocation of seats when the AfD entered and the FDP returned.

G.5 Sample composition and descriptive statistics

Table G3 compares included and excluded mainstream speeches, Table G4 reports the native scale and dispersion of the outcomes in the estimation sample, and Table G5 the share of words directed into each identifiable sector. These comparisons describe sample composition; the causal estimates concern legislators who retained a committee across terms.

TABLE G3: THE ESTIMATION SAMPLE AGAINST THE MAINSTREAM CORPUS

	In estimation sample	Excluded mainstream	Difference
Female	0.34	0.40	-0.06
Age	50.92	52.50	-1.58
East Germany	0.19	0.19	-0.00
Academic title	0.20	0.22	-0.02
Constituency candidate	0.99	0.96	0.03
Words per speech	811.94	764.96	46.97
Names the AfD	-0.38	-0.43	0.05
Attention to AfD flank	-0.04	-0.03	-0.00
Gesture share	-0.02	0.06	-0.08
Pitch variation	-0.19	0.07	-0.26
Loudness variation	0.70	0.85	-0.15
Speeches	9,376	11,343	
Legislators	269	636	

Notes: Mainstream speeches in the sample window, split by whether they meet the estimation-sample restrictions. Outcome rows are in corpus standard deviations. Speech counts sum to the mainstream speeches in the sample window of Table A1. Speaker counts overlap: a legislator can contribute speeches to both groups, for instance when only some of their speeches meet the restrictions.

TABLE G4: DESCRIPTIVE STATISTICS, ESTIMATION SAMPLE

	CDU/CSU		SPD		Greens		Left	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Names the AfD	0.012	0.330	0.014	0.289	0.025	0.219	0.029	0.234
	(0.110)	(0.470)	(0.118)	(0.453)	(0.157)	(0.414)	(0.169)	(0.424)
Attention to AfD flank	0.047	0.041	0.041	0.035	0.054	0.037	0.063	0.055
	(0.069)	(0.073)	(0.061)	(0.061)	(0.080)	(0.065)	(0.098)	(0.094)
Gesture share	0.245	0.266	0.285	0.310	0.352	0.382	0.336	0.336
	(0.185)	(0.195)	(0.224)	(0.219)	(0.226)	(0.236)	(0.228)	(0.212)
Pitch variation	0.109	0.106	0.107	0.103	0.095	0.093	0.104	0.105
	(0.020)	(0.019)	(0.020)	(0.018)	(0.019)	(0.015)	(0.019)	(0.018)
Loudness variation	0.624	0.544	0.609	0.535	0.601	0.524	0.598	0.522
	(0.076)	(0.061)	(0.077)	(0.063)	(0.075)	(0.056)	(0.079)	(0.053)
Speeches	2,041	1,665	1,558	1,139	1,068	663	849	393
Legislators	121	125	77	78	35	35	28	24

Notes: Means with standard deviations in parentheses, computed on the estimation sample. "Pre" is the 18th electoral term, before the AfD entered the Bundestag; "Post" is the 19th term through 13 March 2020. Attention is the share of aligned words assigned to a sustained episode of orientation toward the AfD flank ($\geq +45°$); gesture share is the share of classified word-level frames with a visible hand gesture; pitch and loudness variation are within-speech standard deviations of the corresponding acoustic functional.

TABLE G5: SHARE OF WORDS DIRECTED INTO EACH IDENTIFIABLE SECTOR

Speakers	AfD flank $\geq +45°$	Die Linke flank $\leq -53°$	Between the flanks
Mainstream, before	0.041	0.008	0.951
Mainstream, after	0.037	0.008	0.955
AfD and FDP, after	0.050	0.006	0.944

Notes: Corpus shares for the angular sectors documented in Sections G.4 and K.1. The table describes how much of the speaking record falls in each identifiable part of the chamber; it does not assign attention within the middle sectors to individual parties.

Part II

Technical Appendix

The technical appendix documents the construction of the multimodal corpus in the order in which information enters the analysis: collection and transcription, video and head-pose measurement, gesture and voice, and aggregation. It separates off-the-shelf components from the model trained for this project and reports the diagnostics relevant to each.

H Pipeline Overview

The production pipeline proceeds from official recordings and metadata through transcription, temporal alignment, video and audio processing, and speech-level aggregation. Each stage preserves the identifiers needed to trace a derived measure to its source. Intermediate results are written per video and processing progress is recorded separately, so incomplete jobs remain missing rather than being read as behavioral zeros. The final word-level panel contains more than 37 million timestamped observations.

Figure 3 shows what the synchronized record looks like for a single speech. Head orientation swings repeatedly between the two sides of the room, gestures come in bursts, and pitch and loudness rise and fall within seconds. The speech-level outcomes summarize this movement. Table H1 lists the off-the-shelf components; the gesture classifier is the only model trained for this project (Section L.1).

TABLE H1: OFF-THE-SHELF COMPONENTS USED IN THE PIPELINE

Component	Pipeline task	Implementation/checkpoint
WhisperX (Bain et al. 2023)	Transcription/alignment	v3.1.1; Whisper large-v3 (Radford et al. 2023); German
RetinaFace (Deng et al. 2020)	Face detection	`batch-face`; threshold 0.90
SixDRepNet (Hempel, Abdelrahman, and Al-Hamadi 2022)	Head-pose estimation	300W-LP/AFLW2000 checkpoint (Zhu et al. 2016)
openSMILE (Eyben, Wöllmer, and Schuller 2010)	Acoustic functionals	eGeMAPSv02 (Eyben et al. 2016)
Parselmouth (Jadoul, Thompson, and de Boer 2018)	Pitch estimation	Praat algorithms via Python

I Transcription, Alignment, and Text Measures

Speech audio is transcribed with WhisperX 3.1.1 (Bain et al. 2023) using the multilingual `large-v3` Whisper checkpoint (Radford et al. 2023), German as the specified language. WhisperX forced alignment supplies word-level timestamps. Speaker diarization is performed with pyannote; where diarization identifies multiple voices, the most frequent diarized speaker is retained as the parliamentary speaker.

AfD references are reconstructed from word-level party and person mentions. Person-to-party attribution is retained only where the detected name is preceded by an address marker such as "Herr" or "Frau." This restriction removes common-word and surname collisions, most importantly the German pronoun *Ihnen*, which is also a member's surname.

Naming the AfD. The speech-level naming indicator matches the acronym *AfD* wherever it begins a token or follows a character that is not a letter. Matching whole tokens only would miss the compounds German writes as one word, such as *AfD-Fraktion*, *AfD-Antrag* or *AfD-Abgeordneter*. Requiring the acronym at the start of a token or after a non-letter captures these while excluding ordinary words in which the same three letters occur inside a word across a morpheme boundary, as in *Schlafdefizit*. Relative to whole-token matching, the rule raises the share of speeches naming the AfD by 25 percent. Section C.5

applies the same boundary rule to the other acronym parties, and a capitalisation rule with a stop list to *Die Linke* and the Grünen, so that every group is measured on one standard.

J Interjection Requests and Heckling

The interjection results in Appendix G use the plenary protocols of the 18th and 19th Bundestag in Open Discourse (Richter et al. 2020), covering every speaking turn up to 13 March 2020, whether or not a video of it exists. The protocols record a request for an interjection question in two ways. The chair asks the speaker whether they allow it (*"Gestatten Sie eine Zwischenfrage des Kollegen ...?"*), and a stage direction notes that a member has asked for one (*"Abg. ... [AfD] meldet sich zu einer Zwischenfrage"*). I collect both from the speaker's turn and merge a stage direction with a chair request that immediately follows it. Stage directions also capture requests the chair never voiced.

The rows after a request decide its outcome. If another member speaks next, the request was granted. If the speaker resumes, either directly or with a refusal such as *"Nein, ich möchte im Zusammenhang vortragen"*, it was declined. For granted requests, the questioner's own protocol row identifies them; otherwise the name given by the chair or the stage direction is matched to the members of the term. On granted requests, where both are available, the parsed name agrees with the actual questioner in about 99 percent of cases. Question time formats (*Fragestunde*, *Regierungsbefragung*) are excluded, and interventions after the speech (*Kurzinterventionen*) are not counted as requests.

Koch and Küpfer (2025) provide an independent list of interventions in the Bundestag up to 2020. There is no shared identifier, so I compare the two at the level of speaker and day for 20,972 speeches. The two sources agree on whether a speech contains a request in 98 percent of speeches, and in 82 percent of the speeches in which either of them finds one; the request counts per speech correlate at 0.85. My extraction finds somewhat more requests, most of them declined.

Heckles are the interjections (*Zurufe*) that the stage directions attribute to a parliamentary group, such as *"Zuruf von der SPD"*. I count them per speaking turn of the group at the lectern; a heckle attributed to several groups counts for each.

K Video Preprocessing, Face Detection, and Head Pose

The visual pipeline retains footage classified as showing the speaker frontally or at the lectern. Within eligible images, faces are detected with the `batch-face` implementation of RetinaFace (Deng et al. 2020) on the GPU at a confidence threshold of 0.90; degenerate detections and faces with either side shorter than twenty pixels are discarded. The largest available face is used for the analysis, as additional faces usually appear smaller in the background. Head pose is estimated with SixDRepNet (Hempel, Abdelrahman, and Al-Hamadi 2022) using the `6DRepNet_300W_LP_AFLW2000.pth` checkpoint.

Raw yaw, pitch and roll remain missing when no valid pose can be recovered. In the processed series, gaps of at most five consecutive word-level observations are linearly interpolated and a centered three-word rolling median suppresses isolated jitter. Horizontal orientation indicators use $+45°$ for the AfD flank and $-53°$ for the Left flank, each also reported bounded at $+70°$ and $-70°$, as described in Section 3 and Section G.4. Looking toward notes is coded under three rules: the original vertical cutoff of $-20°$; a conservative rule combining $-20°$ with a horizontal angle of at most $26°$ in absolute value; and a calibrated rule combining $-11°$ with the same horizontal restriction. The two-dimensional classifiers attain AUCs of approximately 0.92–0.93 against 600 human-labeled frames.

K.1 Angle calibration, sector definitions, and the 18th Bundestag

Convention and geometry. A horizontal angle of $0°$ is the direction a speaker faces when squared up to the chamber from the lectern; positive angles are to the speaker's right. Because every speech is delivered from the same lectern, the same angle points at the same part of the room for every speaker. Angles are mapped to seats on the chamber's orthographic floor plan, with the speaker at the position the plan marks, and with the seats of each term counted row by row from photographs of that term (Fig. A3). I do not measure angles on the photographs themselves. They are oblique and wide-angle, so an angle read off them has to be rescaled by a factor fitted to some known direction, and the only direction available is the one I would want to check: Arnold and Küpfer (2024) place the FDP–AfD boundary at $+45°$, and a scale anchored there cannot then be used as evidence about $+45°$. The floor plan needs no such anchor.

A plan of the chamber. I therefore use an orthographic floor plan of the chamber.[8] Every seat on it is a separate shape, so detecting them recovers 629 of the 630 seats and sorts them into twelve concentric rows, giving the centre of the rows, each row's radius and each row's angular extent. The speaker's position is marked on the plan, behind the lectern. Figure A3 draws both terms in that room. The seats of each block are counted, row by row, from press photographs of each term published by *tagesschau.de*, which does not identify their origin. Counting seats off a photograph requires only that it be legible, not undistorted, which is why the counts survive where angles measured on the same images would not. Two properties of the room make the counts transferable to the plan: the row capacities are fixed by the building, and the aisles are radial, so a boundary counted at the front can be carried to the back.

What the plan adds is a limit the photographs cannot show. The government and Bundesrat benches stand between the lectern and the outer rows, so beyond row six the flanks are visible but might be distorted. Row six's ends lie at $\pm 83^\circ$, matching the edge of the seating visible in the photograph; 86 per cent of each overlap band is generated within those six rows.

What the geometry resolves. Reading off which groups a speaker has in view in each direction gives, for the 19th Bundestag, only Left seats from -83° to about -66°, Left and SPD seats both in view to about -52°, SPD seats alone to -34°, the Greens alone from -26° to -16°, the CDU/CSU from about -10° to $+32^\circ$, a narrow stretch of FDP around $+43^\circ$, FDP and AfD both in view from about $+46^\circ$ to $+62^\circ$, and only AfD seats beyond that. Each group therefore holds some angle to itself, but the transitions are wide, and with a head-pose model that errs by about four degrees (Hempel, Abdelrahman, and Al-Hamadi 2022) the narrow middle stretches carry little. The two flanks are where the paper interprets orientation, and the sectors it uses begin inside the transitions rather than beyond them.

[8] Published by *info.BILD.de*, source Politico, for the 21st Bundestag. The seating it shows is a later term's, but the room is the same one; only the blocks within it differ.

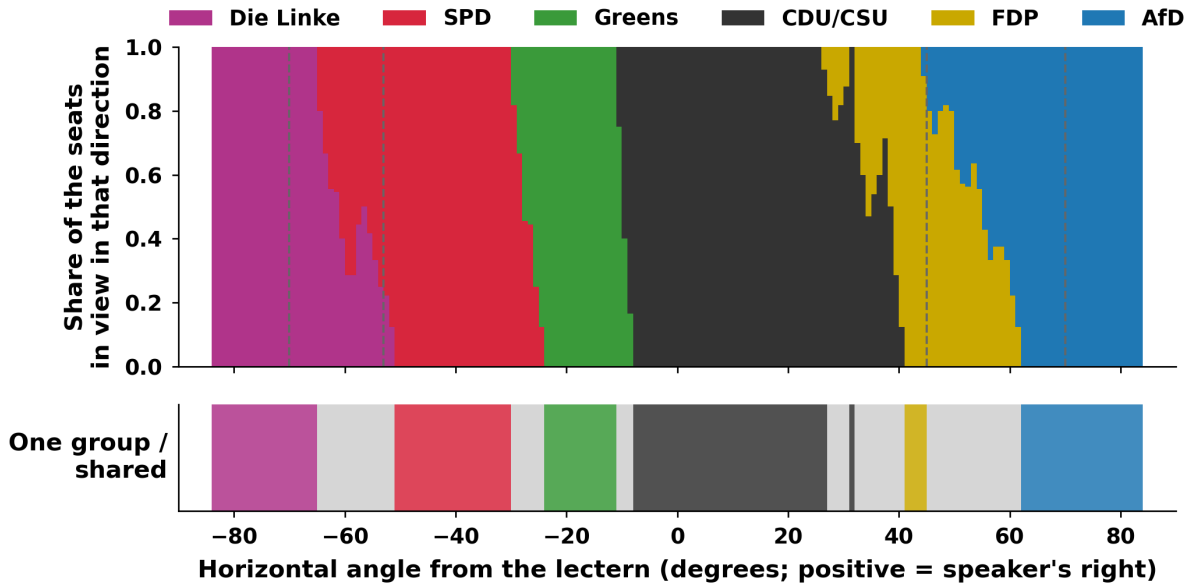


FIGURE K1: WHAT A HEAD ANGLE RESOLVES, BY DIRECTION

Notes: Built from the same reconstructed seating as Fig. A3. For every degree, the share of the seats in view there held by each group, over a three-degree window. Beyond 40° the government and Bundesrat benches hide the rows behind the sixth, so the flanks are drawn on the rows the speaker can see. Lower panel: coloured where one group holds at least 90 percent of the seats in that direction, grey where the direction is shared. Dashed: the sector bounds used in the paper.

Why the sectors open inside the shared stretch. Both sectors begin where the neighbouring group is still in view, and most of the attention they record falls in precisely that stretch. The geometry accounts for both, and for why this is what addressing a flank group should look like. A boundary between two blocks runs radially from the centre of the rows rather than from the lectern, so it is seen at a smaller angle in the near rows than in the far ones. The angles just beyond $+45°$ are therefore where a speaker sees the AfD's *front* benches, while the angles beyond $+62°$, which no other group shares, are where they see its back rows: of the AfD seats in view between $+45°$ and $+56°$ the average sits in the second row, and between $+62°$ and $+83°$ in the fifth. The same holds on the other flank. The front benches require the smallest turn—the nearest AfD seat lies at $+46.3°$ and the nearest Left seat at $-53.1°$, both in the first row—so a speaker who addresses either group turns to them before anyone else. They are the benches most reliably occupied through a sitting. Attention concentrated in the shared stretch is therefore consistent with addressing the flank group's front benches.

Word-level episodes and pose coverage. The baseline orientation measure is the share of all aligned words assigned to a sustained orientation episode, not a share of elapsed speaking time. One frame is analyzed per word. An observed angle in the sector starts or continues the episode. Up to two consecutive words without usable pose can inherit the active state; longer unmeasured gaps terminate it. Looking at notes during an active episode preserves the state, while an observed direction outside these rules terminates it. Words without usable pose remain in the denominator and enter the numerator only through the short-gap rule.

Mean pose coverage in the estimation sample is 86.6 percent. Moving from the lowest to the highest committee exposure is associated with 3.15 percentage points less coverage (s.e. 1.55, $p = 0.042$), so the denominator convention warrants a sensitivity check. I rebuild orientation using only measured-pose words in both numerator and denominator, and reconstruct engagement with the same standardization and averaging procedure as the baseline. Orientation changes from -0.267 to -0.256 standard deviations; engagement changes from -0.415 to -0.406, with $p = 0.014$. Keeping the published episode numerator but dividing by measured-pose words gives engagement of -0.400 ($p = 0.015$). All estimates use the same 9,376 speeches: none has zero pose coverage. These checks show that the engagement result is not sensitive to the tested denominator conventions. Table K1 reports estimates and standard errors. Gesture uses a different denominator: only words with a usable classification enter its share, without a confidence floor.

TABLE K1: SENSITIVITY TO THE ORIENTATION DENOMINATOR

Orientation denominator/numerator	Orientation	Engagement
All aligned words (baseline)	-0.267	-0.415
	(0.163)	(0.167)
Observed denominator, baseline numerator	-0.250	-0.400
	(0.159)	(0.163)
Observed numerator and denominator	-0.256	-0.406
	(0.159)	(0.164)

Notes: Baseline orientation divides all words assigned to sustained orientation episodes by all aligned words. Observed-pose variants divide by words with a measured angle; the first retains the baseline numerator, including short carried gaps, and the second restricts the numerator to measured-pose words too. Each orientation variant is standardized on the same estimation sample; engagement is rebuilt as the restandardized mean of naming and the corresponding standardized orientation measure. Baseline fixed effects and legislator-clustered standard errors; identical sample of 9,376 speeches and 269 legislators throughout. No empirical specification or primary outcome is replaced by these sensitivity checks.

Sector definitions. In the 19th Bundestag, the AfD occupied the far-right flank as seen from the lectern, with the FDP between it and the CDU/CSU. Arnold and Küpfer (2024) place the AfD block between $+45°$ and $+70°$. I keep their lower bound, because two calculations of my own support it. On the reconstructed seating the AfD's innermost bench in the speaker's view lies at $+46.3°$; and gaze becomes more likely to follow a naming of the AfD than of the FDP at $+46.0°$, which is where the two distributions of head angle after a naming word cross. The reconstruction places the outer edge at about $+82°$ within the first six, most prominent rows. Beyond row six it extends further and remains visible, although partly hidden behind the government benches. I therefore report the AfD sector both bounded following their measure and left open.

On the opposite flank I apply the same rule rather than mirroring the angle: Die Linke's innermost bench in view lies at $-53.1°$, so the Left sector opens at $-53°$ and is likewise reported open and bounded at $-70°$. It is not the mirror of $+45°$ because the chamber is not symmetric. Neither sector is free of the neighbouring group: the AfD holds a clear field of view only beyond about $+62°$, Die Linke only beyond about $-66°$. What the sectors mark is where a group's benches enter the field of view, especially since the first benches to appear are the most prominent front row seats.

Each measure is the share of a speech's words spent in a sustained episode of orientation into the sector rather than the share of words at those angles: an episode opens when the sector is entered, persists through glances at the speaker's notes and through gaps of up to two words with no usable pose, and closes otherwise. Table A11 reports the pooled estimates under each definition of the AfD sector, and Table A10 the party-specific estimates for both flanks.

The 18th Bundestag. The 18th had no AfD and no FDP, and its other groups were differently sized, so its blocks fall elsewhere: the ring in the "before" panel of Fig. G4 would otherwise show a chamber that did not exist. I measure that term's blocks on the floor plan described above rather than on a photograph, because the plan is orthographic and the photographs of this chamber are neither. What separates two blocks is an aisle, which the Bundestag creates by leaving one or two seats out of a row, so aisles move between terms and mark exactly the boundaries I need. I count, row by row from photographs of the term, how many seats each group holds and how wide the aisle beside it is, and place

those counts on the plan's rows.[9] The measured blocks are the Left from $-83°$ to $-53°$, the SPD to $-12°$, the Greens to $+5°$, and the CDU/CSU across the entire right-hand side of the chamber to $+83°$, the stretch in which the AfD would later sit.

I check the reconstruction in three ways, reported in the replication material: the row capacities counted from the photographs match those implied by the floor plan, the aisles fall at a nearly constant fraction of every row, as radial aisles should, and a seventh row counted after the reconstruction agrees with it to within two seats for every group. The 18th term's blocks are used to draw the seating in two figures and in descriptive comparisons of where attention falls; no estimate in the paper depends on them.

K.2 Validating the attention measure

Figure 2, measured on the 19th Bundestag, shows that speakers turn toward the group they name, in seating order. Three further checks use the structure of the data rather than the ordering and are reported in Table K2. All are speech-level associations between naming a group and orienting toward a sector, compared within legislator, with legislator and quarter fixed effects.

A period in which the sector is empty. The AfD sector is a range of angles. It exists in the 18th Bundestag exactly as it does in the 19th, because it is defined by the geometry of the room rather than by who occupies it, and in that term the AfD held no seats. Naming the AfD before entry therefore cannot be an act of addressing anyone, and if the measure captures addressing it should not move orientation into the sector. It does not: the association between naming the AfD and time spent oriented beyond $+45°$ is -0.07 standard deviations before entry ($p = 0.43$) against $+0.38$ after ($p < 0.001$), and the difference is $+0.41$ ($p < 0.001$). Only 1.98 per cent of pre-entry speeches name the AfD, so the first number rests on 109 speeches.

A sector that is occupied throughout. The 109 pre-entry speeches provide limited precision, so I also examine a group whose benches were occupied in both terms. Die Linke

[9] An aisle runs radially from the centre of the rows rather than from the lectern, so from the lectern it covers a range of angles rather than a single one. The three ranges are $-64°$ to $-43°$, $-14°$ to $-10°$ and $+3°$ to $+7°$; the first is wide because that aisle is nearly radial from the lectern's point of view, so a small depth carries a large angle. The ring in Fig. G4 draws these ranges grey, as it draws the 19th term's overlap bands, so the two panels mean the same thing; the blocks quoted here run between their midpoints.

held the far-left sector in both terms. Naming Die Linke moves orientation into that sector by $+0.49$ standard deviations before entry and $+0.52$ after, both $p < 0.001$. This positive control shows that the pre-entry data detect orientation toward an occupied flank.

The CDU/CSU does not provide a second such case, although in the 18th Bundestag its block ran across the right-hand side of the chamber and into the stretch the AfD later occupied. Naming the CDU/CSU does not move orientation beyond $+45^\circ$ in that term (-0.03, $p = 0.31$). The geometry explains why: what a sector records is where a group's benches *enter* the field of view, and the CDU/CSU's nearest seats in the 18th term lay at about $+5^\circ$. A speaker addressing them had no reason to turn as far as the flank, whereas the nearest AfD and Left seats lie at $+46.3^\circ$ and -53.1°, so addressing either group requires entering its sector. The checks here use only the fact that the AfD held no seats before 2017, which needs no reconstruction of that term's blocks.

Each sector responds to its own group. Within the 19th Bundestag the two sectors separate cleanly. Naming the AfD raises time in the AfD sector by $+0.38$ standard deviations and *lowers* time in the Left sector by -0.09; naming Die Linke raises the Left sector by $+0.52$ and lowers the AfD sector by -0.17. A measure that responded to confrontation in general rather than to direction would raise both sectors together.

TABLE K2: VALIDATION OF THE ATTENTION MEASURE

	Names the group	Speeches
A. Naming the AfD and the AfD sector ($\geq +45°$)		
Before entry (18th)	-0.071	5,516
	(0.101)	
After entry (19th)	0.380***	3,855
	(0.058)	
Names the AfD $\times$ after entry	0.407***	9,376
	(0.112)	
B. Naming Die Linke and the Die Linke sector ($\leq -53°$)		
Before entry (18th)	0.492***	4,667
	(0.068)	
After entry (19th)	0.523***	3,462
	(0.100)	
C. Both sectors, 19th Bundestag		
Names the AfD, AfD sector	0.380***	3,855
	(0.058)	
Names the AfD, Die Linke sector	-0.088**	3,855
	(0.035)	
Names Die Linke, AfD sector	-0.166***	3,462
	(0.048)	
Names Die Linke, Die Linke sector	0.523***	3,462
	(0.100)	

Notes: Outcome: the share of aligned words assigned to a sustained episode of orientation into the stated sector, standardized over the estimation sample. Each row is a separate regression of that outcome on an indicator for naming the group, with legislator and calendar-quarter fixed effects; standard errors clustered on the legislator in parentheses. Mentions of a speaker's own group are excluded. Panel A asks whether naming the AfD moves orientation into the AfD sector before the AfD held any seats; Panel B establishes that the pre-entry data detect a turn toward a sector in which the named group sits; Panel C reports both sectors against both namings in the 19th Bundestag. These are speech-level associations within legislator and are not treatment effects. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

L Delivery Measures: Gesture and Voice

L.1 Gesture classification

The production gesture classifier is a ResNet-50 (He et al. 2016) initialized with ImageNet weights (Russakovsky et al. 2015), assigning each eligible 224×224 image to no visible hand gesture, a one-hand gesture, or a two-hand gesture. The two gesture classes are

pooled, and the speech-level outcome is the share of classified word-level frames containing either. With one analyzed frame per aligned word, this is also a share of words with a usable classification; words without a classification are excluded from the denominator. All available predictions enter the gesture measure, without a confidence floor. The annotation corpus contains 5,190 usable images: 2,544 "none," 1,317 "one hand," and 1,329 "two hands," combining 2,550 original annotations with four targeted active-learning rounds. A blind relabeling of 135 original images produced 97.8 percent agreement and Cohen's $\kappa = 0.967$.

The corpus is split, stratified by class with random seed 42, into 4,671 training and 519 development images, with a fixed set of 450 further images held out of model fitting for architecture comparison. The split is at the image level rather than the speaker or video level. A zero-overlap audit rules out duplicated image paths, but the evaluation can still contain speaker- or recording-level dependence. I therefore retrained the classifier on a speaker-disjoint partition of the labelled frames and, for comparison, on an image-level partition of the same frames, holding the architecture, hyperparameters and seeds fixed so that only the split differs. Averaged over two seeds, the image-level split returns an accuracy of 0.876 and the speaker-disjoint split 0.856. The gap of about two percentage points runs the same way in both seeds, so the image-level figure is mildly optimistic; two seeds cannot separate that gap from run-to-run variation, however (Welch test, $p = 0.20$, against a seed-to-seed spread of 0.007 and 0.012). One-hand F_1 is similar (0.797 against 0.796); the difference lies in the other two classes.

I compared ImageNet-initialized MobileNetV2 (Sandler et al. 2018), DenseNet121 (Huang et al. 2017), EfficientNetB0 (Tan and Le 2019) and ResNet-50 (He et al. 2016) with architecture-specific preprocessing, each adding global average pooling, a 128-unit ReLU layer and a three-unit softmax output. Training uses class weights and focal loss ($\gamma = 2$, $\alpha = 0.25$), first with a frozen backbone for at most ten epochs and then unfrozen at 10^{-5} for at most five, with early stopping and restoration of the best development weights. Augmentation applies brightness and contrast jitter and randomly masks the bottom 0–30 percent of the image to reproduce lectern occlusion.

ResNet-50 is the production model. On the fixed set it reaches 84.9 percent accuracy and macro-F1 of 0.851, against 74.2 percent and 0.739 for MobileNetV2; one- and two-hand F1 are 0.821 and 0.862. The production measure retains all predictions. A softmax confidence threshold of 0.60 would keep 83.6 percent of images and raise accuracy among retained images to 90.2 percent, but it would also change the composition of ges-

tures retained. I therefore report unfiltered performance as the primary statistic and use thresholded measures only as robustness checks.

TABLE L1: VALIDATION PERFORMANCE OF THE GESTURE CLASSIFIERS

Model/rule	Images retained	Coverage	Accuracy	Macro-F1	Gesture-class F1
ResNet-50, all predictions	450	1.000	0.849	0.851	0.821 / 0.862
confidence ≥ 0.50	432	0.960	0.856	0.858	0.824 / 0.872
confidence ≥ 0.60	376	0.836	0.902	0.902	0.880 / 0.912
confidence ≥ 0.70	327	0.727	0.914	0.913	0.893 / 0.913
confidence ≥ 0.80	259	0.576	0.934	0.934	0.906 / 0.952
MobileNetV2, all predictions	450	1.000	0.742	0.739	0.699 / 0.713

Notes: The last column reports one-hand/two-hand F1. The fixed set was not used for fitting. The split is at the image level.

TABLE L2: WHERE THE GESTURE CLASSIFIER ERRS

	Predicted		
Labelled	No gesture	One hand	Two hands
No gesture	142	18	3
One hand	18	140	11
Two hands	4	14	100

Notes: All 450 frames of the fixed validation set, no confidence floor. Rows are the human label, columns the classifier's prediction.

TABLE L3: GESTURE ESTIMATES UNDER EACH CONFIDENCE FLOOR

Confidence floor	Speeches	Mean share	Coefficient	p
None	9,376	0.297	-0.105	0.392
			(0.122)	
0.50	9,376	0.285	-0.086	0.477
			(0.121)	
0.60	9,373	0.255	-0.082	0.493
			(0.120)	
0.70	9,368	0.225	-0.066	0.583
			(0.120)	

Notes: The specification of Table A5, with the gesture share standardized, estimated on the measure built at each confidence floor.

Classification error and the gesture estimate. The labelled frames allow me to assess how classification error may affect the gesture estimates. Without a confidence floor, the classifier labels a true non-gesture frame as a gesture with probability $\alpha_0 = 0.129$ and misses a true gesture with probability $\alpha_1 = 0.077$. These estimates imply an attenuation factor of $1 - \alpha_0 - \alpha_1 = 0.795$, with a bootstrap interval of $[0.728, 0.854]$. If the error rates are constant across the analysis sample and the validation estimates carry over to it, the expected predicted gesture share is a linear function of the true share, with slope $1 - \alpha_0 - \alpha_1$. Under these assumptions, an unstandardized linear coefficient can be corrected by dividing it by this factor (Hausman, Abrevaya, and Scott-Morton 1998, Meyer and Mittag 2017).

The unstandardized coefficient of -0.023 would therefore correspond to approximately -0.029 for human-coded gesture shares. Using the endpoints of the attenuation-factor interval gives corrected coefficients between -0.032 and -0.027. This range reflects uncertainty in the attenuation factor alone, not a confidence interval for the corrected effect. Treating the factor as fixed rescales the coefficient and its standard error equally, leaving the t-statistic unchanged; inference that accounts for estimation of the factor may differ. The reported standardized coefficient of -0.105 cannot be converted in the same way into standard deviations of human-coded gesturing, because the standard deviations of predicted and human-coded shares need not coincide.

The main limitation is that classification errors may vary systematically with exposure. Overall accuracy alone does not establish the validity of downstream estimates: bias also depends on the relationship between prediction errors and the regressors (Ludwig, Mullainathan, and Rambachan 2025). Drawing validation frames without regard to committee assignment does not establish that the classifier's errors are unrelated to exposure. I therefore interpret the calculation as a sensitivity assessment under constant error rates and report the uncorrected estimates throughout.

L.2 Vocal delivery

I characterize vocal delivery with the eGeMAPSv02 functional set (Eyben et al. 2016), implemented in the Python `opensmile` package, and with Parselmouth pitch estimates. The two outcomes are within-speech variation in pitch and in loudness. They describe how animated a speech is, and because each speech is compared with itself, they are robust to differences in recording conditions, which affect the level of loudness in particular.

Pitch also has an established use in political science as a measure of emotional intensity, where the relevant measure is mean pitch relative to the speaker's own baseline (Dietrich, Hayes, and O'Brien 2019); I use that measure where the question is arousal (Section 6.2).

Speech-level features are computed directly from the complete audio of the speech, and sentence-level features from each WhisperX segment; neither is an average of word-level estimates, which are too noisy to aggregate. At the word level the pipeline retains pitch and intensity only, since jitter, shimmer, HNR and MFCC functionals are not reliable on typical 0.2–0.8 second word clips. Where I compare the sentence that names the AfD with the rest of the same speech, I use sentence-level pitch and loudness. Because openSMILE extraction is deterministic rather than a fitted classifier, classification accuracy does not apply to it.

M Aggregation, Missingness, and Reproducibility

Predictions are linked to aligned words by stable video, speaker and word identifiers. Visual outcomes aggregate word-level observations rather than sentence means. Orientation divides words assigned to a sustained orientation episode by all aligned words; unmeasured-pose words remain in the denominator and enter the numerator only when carried through the short-gap rule. Gesture divides words classified as one- or two-hand gestures by all words with a classification, excluding unclassified words from both numerator and denominator. The gesture measure has no confidence floor. Acoustic outcomes use complete speech or sentence clips as described in Section L.2. Each outcome retains its usable-observation count. Raw and short-gap-interpolated head-pose series are stored separately, and speeches with no usable pose are removed by the usable-frontal-footage restriction before estimation. The production orientation measure can assign zero to such speeches in the broader corpus, but none enters the estimation sample. The assembly notebooks contain explicit duplicate-key, merge-cardinality, progress-file, impossible-share and modality-coverage checks.

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