The Address of the Party: Measuring Partisan Visibility in Turkey

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November 2026

Abstract

A local office puts party organization on public view. In Turkey, where electoral law gives parties an incentive to organize across districts, flags and banners often identify the building from down the street. I examine where parties locate their offices and what they display nearby using a directory of 5,928 party organizations across the country's 973 districts, gridded population data, OpenStreetMap amenities, and district election returns for 2014–2024. Trained annotators marked visible party symbols in 6,496 election-period Street View panoramas taken around the listed addresses. Offices tend to be near commercial amenities and the seat of government, and they cluster near one another. In the directory, 72 percent of offices have a rival within 250 meters, compared with 30 percent predicted by a model accounting for residential population and the local built environment. Parties with larger local vote shares are more likely to have an office. Once vote share is accounted for, I find little evidence of a relationship with either control of the municipality or electoral competitiveness. A party's symbols are much more numerous near its own office than near another party's office, and this difference diminishes within a few hundred meters. A party's share of the symbols around offices has a modest positive association with its district vote share. I find no evidence that symbol shares predict changes in electoral support.

Keywords: party organization; political geography; campaign symbols; images as data; Street View; Turkey

Word count: about 9,300 words of text, excluding tables, figure captions, references and the online appendix.

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1 Introduction

"All politics is local."

Thomas P. "Tip" O'Neill, Speaker of the U.S. House of Representatives, 1977–1987

A district party office is where members file forms, organizers recruit poll watchers, and voters can bring a problem to the party. In Turkey, the office is often easy to spot. Flags hang from the balcony, a banner covers the facade, and, as an election approaches, strings of pennants may stretch across the street. A short walk through a district center can reveal which parties have a presence there.

I use the location of party offices and the symbols displayed around them to study local party organization. Comparative research has shown that dense local structures help parties win votes, withstand electoral setbacks, and maintain legislative cohesion (Tavits, 2013; Levitsky, 2003; Van Dyck, 2014). Local branches also help turn sympathizers into partisans (Samuels and Zucco, 2015). Studies typically measure these structures using membership figures, branch counts reported by headquarters, and expert judgments (Scarrow, 2015; Poguntke et al., 2016). Such measures tell us little about where within a district parties set up offices or what they display nearby. The few studies that examine the location of party premises have focused on temporary field offices in U.S. presidential campaigns (Masket, 2009; Darr and Levendusky, 2014). We know less about permanent offices in multiparty systems, where several parties may compete for visibility on the same few streets.

Turkey's Law on Political Parties gives parties an incentive to establish district branches by tying ballot access to territorial organization for parties without a parliamentary group (Türkiye Büyük Millet Meclisi, 1983). The governing Justice and Development Party (AKP) is widely regarded as one of the most thoroughly organized parties in a contemporary electoral regime (Baykan, 2018; Kumbaracıbaşı, 2009). The main opposition Republican People's Party (CHP) has an organization that reaches back a century, while parties founded after 2017 have had to build branch networks of their own. Partisan identities in Turkey are strong and polarized (Laebens and Öztürk, 2021; Somer, 2019), and political movements have long used flags, portraits, and banners to make their presence known in public space (Çınar, 2005; Navaro-Yashin, 2002; Özyürek, 2006).

I ask where within districts parties locate their offices and what accounts for differences in their reach across districts. I then examine which parties' symbols appear near offices, how far the displays extend, and how the mix of symbols relates to the district vote.

The analysis begins with a directory built from 218,894 place records returned by map searches for 62 party names across the country. The records identify 14,583 distinct

coordinates, of which 5,928 are party organizations. These include provincial, district, and town branches, campaign offices, and a handful of national headquarters. The same searches yielded 6,363 public institutions, including education directorates, courthouses, and title-deed offices. These institutions provide a comparison group because their listings came from the same searches and I sampled the surrounding Street View imagery the same way. The imagery search queried locations at fixed bearings and distances around each coordinate. The sample covers five national and local elections between 2014 and 2024, with panoramas from the election month and the two preceding months. Trained annotators marked party flags, banners, posters, and logos, as well as Turkish flags and images of Atatürk, in 6,496 panoramas. After overlapping annotations were merged, 17,631 symbols remained, including 13,258 party symbols. I combine these data with official returns for eight elections in all 973 districts, gridded population at 100-meter resolution, and OpenStreetMap data on amenities and roads.

Compared with locations sampled in proportion to residential population within the same district, party offices tend to be near shops, restaurants, and banks, as well as main roads and government buildings. The initially strong association with population density largely disappears after accounting for these features. The pattern suggests that parties value locations where more people pass and can see the office. Offices also cluster near competitors. 72 percent have a rival office within 250 meters, compared with 30 percent predicted by a model that accounts for population, amenities, roads, and proximity to government buildings.

Within a district, parties with larger vote shares are more likely to have an office. The association is stronger among smaller parties, whose networks cover fewer districts. After accounting for vote share, I find little evidence that a party's presence is related to holding the district mayoralty or to electoral competitiveness. Parties that narrowly won the mayoralty have about as many listed offices as those that narrowly lost. The geography of party offices is consistent with parties investing in areas of core support.

On the street, a party's symbols are much more numerous within 50 meters of its own office, after accounting for differences across panoramas and each party's overall level of display in the district and election window. I call this difference the home-turf premium. It is largest closest to the office and declines with distance across the bands out to 250 meters. I find a premium in each election window and for every major party, and the observed estimate is much larger than any estimate obtained by randomly reassigning offices among parties within districts. Panoramas near party offices also contain more party symbols than panoramas near public institutions sampled in the same way. The count models provide little evidence that the premium is larger for incumbents. The

estimated association between the premium and a party's local vote share is negative and imprecise.

The mix of symbols around offices is associated with how a district votes. A party's share of the symbols in a district and election window is positively associated with its vote share after accounting for party-by-election and district-by-election effects. The association persists after a split-sample correction for measurement error. A ten-percentage-point difference in symbol share corresponds to less than one percentage point in vote share, and the association is clearer in local elections than in general elections. I find no evidence that symbol shares predict changes in vote share, that a more even mix of symbols is associated with narrower winning margins, or that more intensive displays are associated with turnout.

For scholars of party organization, the office directory provides a measure of local presence independent of what party headquarters report. Even in a system with a dominant, resource-rich incumbent, the distribution of party offices is consistent with core-voter models (Cox and McCubbins, 1986). The directory captures a single point in time, so whether parties open offices where they have voters or build support through offices remains an open question. Work on campaign visibility has often examined yard signs in the United States (Makse and Sokhey, 2014; Green et al., 2016). In the Turkish setting, much of the display around party premises is concentrated on the streets where parties have space to hang their own flags and banners. The article also contributes to research using images as data (Torres and Cantú, 2022; Williams et al., 2020) by linking a sampling frame based on where political actors maintain offices to street imagery annotated by trained coders.

I develop the hypotheses in the next section, then describe the Turkish setting, data, and estimation strategy. The final sections present the results and discuss their interpretation and limitations.

2 Party Premises, Visibility and the Vote

2.1 Why the address matters

Classic accounts of party organization describe the local branch as the basic unit of the mass party (Duverger, 1954; Panebianco, 1988). Later work argued that parties in established democracies had grown less dependent on their members and more reliant on the state (Katz and Mair, 1995). Research on newer democracies finds that parties that invest in local structures tend to do better at the polls and remain more cohesive in office (Tavits, 2013). In Latin America, networks of neighborhood offices have helped sustain Peronism

and contributed to the growth of the Brazilian Workers' Party (Levitsky, 2003; Auyero, 2000; Van Dyck, 2014; Samuels and Zucco, 2015). A branch gives voters somewhere to contact the party and provides a base for coordinating brokers and activists (Stokes et al., 2013; Szwarcberg, 2015). By maintaining an office, the party also signals that it has a stake in the locality.

Which address serves these purposes depends on what the branch is for. To make it easy for supporters to visit, a party might choose an office near where they live. An office meant to be seen would benefit from a location where people already pass, such as a main street, a market, or a bus terminal. Pedestrian traffic tends to concentrate along a small part of the street network and around commercial and transit uses (Hillier et al., 1993; Ewing and Cervero, 2010; Mehta, 2007). Earlier work in Istanbul finds that party symbols concentrate in much the same places (Caliskan et al., 2026). An office may also be easier to run near the district governorship and town hall, where party officials deal with the local administration, or near other parties whose activities they want to follow.

Research on spatial competition suggests that firms selling similar goods to the same customers tend to cluster (Hotelling, 1929), and studies of industrial location find concentration beyond what the geographic distribution of economic activity would predict (Ellison and Glaeser, 1997; Duranton and Overman, 2005). Parties may have a similar reason to locate together. A branch on the same street as its rivals can reach the people who regularly pass their doors and be seen as a local contender. The supply of premises could produce the same pattern. Only a handful of buildings on a district's main street may have upper-floor offices available for rent. Both mechanisms predict that parties will locate nearer one another than the distribution of people and amenities would suggest.

2.2 Hypotheses

Siting (RQ1). Three features of the district may shape where parties put their offices.

H1a (population centrality). Compared with control locations in the same district, party offices are closer to the population-weighted center and in more densely populated surroundings.

H1b (amenity environment). Holding local population constant, offices are more likely at locations with more commercial, service, and transit amenities nearby.

H1c (the state and rivals). Offices are closer to the district's seat of government and to other parties' offices than control locations with similar population and amenities. Parties therefore cluster more than population and amenities alone predict.

Reach (RQ2). The literature on distributive politics offers two accounts of where parties invest. Core-voter models predict that parties direct resources toward areas where they already have support, where they know the voters and can mobilize them at lower cost (Cox and McCubbins, 1986). Swing-voter models predict that parties direct resources toward voters whose choices are most responsive. At the district level, this points to places where the contest is close (Dixit and Londregan, 1996). Studies of U.S. campaigns find temporary field offices in both strongholds and battlegrounds (Darr and Levendusky, 2014; Shaw, 2006). Permanent branches carry costs between elections, making it plausible that parties sustain them where they already have a base of support. Incumbency may also matter. In Turkey, municipal office gives parties jobs, contracts, and services to distribute (Kemahlıoğlu, 2012; Marschall et al., 2016; Çınar, 2016). Those resources could help a party sustain a larger local organization than its vote share would suggest.

H2a (electoral strength). Within a district, a party with a larger vote share is more likely to have an office and has more offices. The slope is steeper for smaller parties than for the AKP, CHP, and MHP, which already have offices in most districts.

H2b (local incumbency). Holding the district mayoralty raises a party's organizational presence beyond what its vote share predicts.

H2c (competitiveness). Conditional on its own strength, a party is more likely to be present in closely contested districts. Core-voter models predict no such relationship.

Street presence (RQ3). Political symbols make a community visible both to its members and to others (Edelman, 1964; Billig, 1995; Brighenti, 2007). In Turkey, disputes over which symbols can occupy streets and squares have long been part of public life (Çınar, 2005; Baykan and Hatuka, 2010). A party can hang and replace flags and banners with relative ease at its own office, where it controls the facade and has members on hand. This gives rise to the expectation of a home-turf premium. A party with a larger local following may be able to display more material, as may a party with access to municipal resources or more lenient enforcement of banner restrictions. Rivals may display more of their own material near the office where elections are close or where one of them has premises nearby.

H3a (home turf). A party's symbols are more likely to appear, and are more numerous, in panoramas next to its own office than next to other parties' offices or public institutions sampled in the same way.

H3b (strength and incumbency). The home-turf premium grows with the party's local vote share and is larger for parties that hold national or municipal office.

H3c (contestation). Rival symbols around a party's office are more numerous where the district is electorally close and where a rival office stands within 250 meters.

Symbols and votes (RQ4). Field experiments on yard signs have found effects on vote choice of one to two percentage points at most (Green et al., 2016; Panagopoulos, 2009). A broader experimental literature finds that campaign contact and advertising have little persuasive effect in general elections (Kalla and Broockman, 2018; Coppock et al., 2020). Displays may nevertheless say something about a party's standing. The people who put up signs tend to be committed partisans (Makse and Sokhey, 2014), and the ability to hang flags and banners along a street depends in part on the supporters and resources a party can draw on locally. In Istanbul, a party's vote share is higher in districts where more of its flags and banners are visible, while the volume of display is unrelated to turnout (Caliskan, 2025). I expect the mix of symbols around district offices to reflect the district's existing distribution of support. Whether the same measure also captures changes in party support between elections is an open question.

H4a (levels). In a district and election, a party's share of the party symbols observed around offices is positively associated with its vote share.

H4b (change). A party's symbol share is positively associated with the change in its vote share since the previous comparable election.

H4c (closeness and turnout). Districts with a more even mix of party symbols have smaller winning margins. I expect no relationship between total symbol intensity and turnout.

Table 6 lists the primary test for each of the twelve hypotheses.

3 The Turkish Setting

Turkey is divided into 81 provinces and 973 districts. Each district has a governor appointed by the central government in Ankara, as well as an elected mayor and council. The governor's office usually shares a building with other branches of the central administration. In the 30 metropolitan provinces, a second tier of elected local government operates at the provincial level.

The Law on Political Parties requires party organization to follow these administrative boundaries. A party consists of central organs and provincial, district, and town organizations (Türkiye Büyük Millet Meclisi, 1983). To contest an election, a party must either have a parliamentary group or have organized in at least half of the provinces six months before polling day and held its national congress. A province counts as organized once the party has established branches in at least one-third of its districts, including the central district. National headquarters must be in Ankara. The eligibility rules give parties a reason to organize even in districts where they have little chance of winning and make

the district chairmanship (*ilçe başkanlığı*) a standard unit of local party organization. A branch typically occupies a rented flat or shop with a signboard and is run by volunteers and a small executive committee. Branches stay open between elections. Parties also open a smaller number of candidate offices and election coordination centers (*seçim bürosu*, *seçim koordinasyon merkezi*) during campaigns and close them after the vote.

The period from 2014 to 2024 spans the consolidation of AKP rule and the party's first major electoral setbacks. The AKP has governed since 2002. Scholars describe the regime that emerged in the 2010s as competitive authoritarian. Elections remained fiercely contested while the incumbent enjoyed substantial advantages in media access, public resources, and the use of the state (Esen and Gumuscu, 2016). A referendum in 2017 replaced the parliamentary system with an executive presidency. From 2018, parties competed in formal alliances, with the AKP and the nationalist MHP in one bloc and the CHP, the newly founded İYİ Party, and smaller partners in another (Selçuk and Hekimci, 2020). I treat the HDP and its successors, the Green Left Party and the DEM Party, as one pro-Kurdish lineage. The movement began using the successor labels in 2023. The opposition won the mayoralties of Istanbul and Ankara in 2019 (Esen and Gumuscu, 2019; Wuthrich and Ingleby, 2020) and lost the presidential and parliamentary elections of May 2023. In March 2024, the CHP finished first in a nationwide election for the first time in decades. Several parties entered during the period under study. The İYİ Party was founded in 2017, the New Welfare Party (YRP) in 2018, Gelecek in 2019, DEVA in 2020, and Zafer in 2021.

The AKP has an extensive local organization. Building on the neighborhood networks of its Islamist predecessors (White, 2002), it maintains branches, women's and youth wings, and neighborhood representatives across the country. Its leadership treats the organization as a central asset (Baykan, 2018; Kumbaracıbaşı, 2009). The AKP is therefore well placed to translate electoral support and incumbency into a visible presence on the street.

Flags are a familiar feature of public life in Turkey. Turkish flags and portraits of Atatürk routinely hang from public buildings and private balconies (Özyürek, 2006; Navaro-Yashin, 2002). Around party offices, flags in party colors hang across streets and from facades, with emblems visible at a distance. Election law regulates where posters and banners may be displayed, and municipalities handle much of the day-to-day enforcement. Parties are otherwise free to display material on their premises, so the street around an office offers a place to observe how far their displays extend.

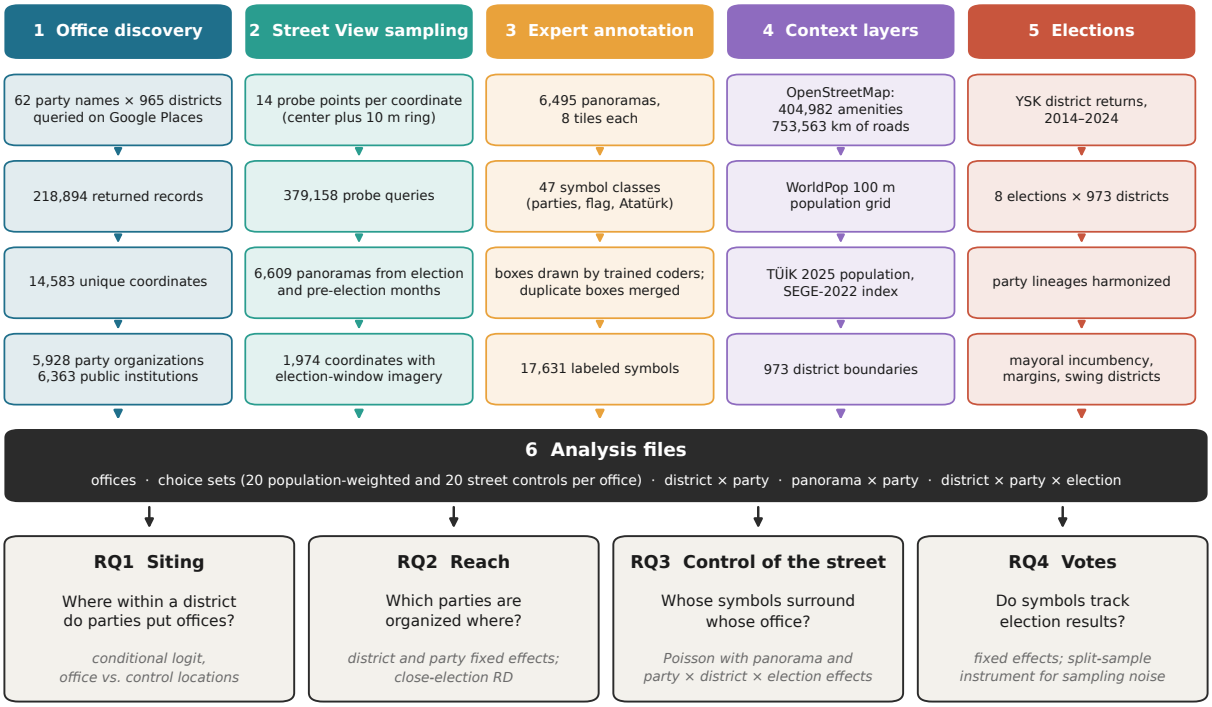

Figure 1: Data collection and processing. Five sources (columns 1–5) are assembled separately and linked by place, panorama, district, and district-election for the four analyses.

4 Data and Measurement

Figure 1 shows how I assembled and linked the data, and Table 1 gives the counts at each stage. Appendix A details the classification rules, crosswalks, and coverage.

4.1 A directory of party premises

I built the directory by searching for the district chairmanship of each of 62 parties in each district. A typical query was "Cumhuriyet Halk Partisi (CHP) Manisa Şehzadeler İlçe Başkanlığı." The 56,804 queries that returned at least one result covered 965 districts and yielded 218,894 place records with names, addresses, coordinates, and place types. Text searches return approximate matches. A search for a small party in a district where it has no branch typically turns up other parties' offices or public institutions such as the district education directorate, election board, and title-deed office.

The records contain 14,583 distinct coordinates. I classify each coordinate using its listed names and a dictionary of party names, abbreviations, and organizational terms. Names that identify a party are coded as *party organization* (5,928 coordinates), those that identify an affiliated body such as a youth foundation as *party-affiliated organization*

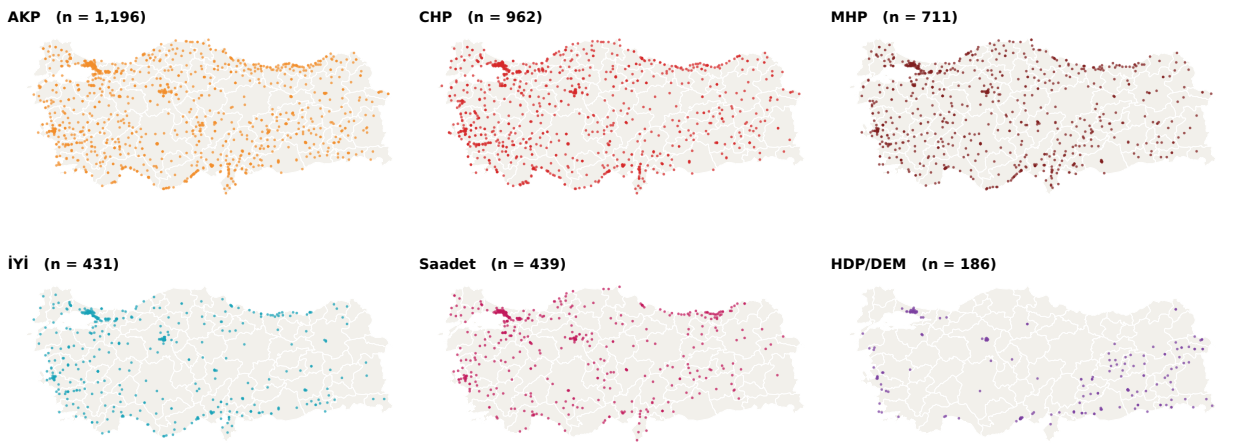

Figure 2: Listed organizations of the six largest party lineages. Points mark coordinates classified as party organizations. White lines show provincial boundaries.

(110), and those that identify state or municipal bodies as *public institution* (6,363). The remaining 2,182 coordinates are coded as *other*. For the robustness checks, I use a stricter rule requiring an organizational term such as "district chairmanship." That rule retains 5,653 party organizations. Among the party organizations, 3,575 are district branches, 968 are provincial branches, 208 are town branches, and 90 are election or campaign offices. The rest are national headquarters, auxiliary branches, or offices whose organizational level cannot be determined from the listing. The AKP accounts for 1,196 organizations, the CHP for 962, and the MHP for 711 (Figure 2 and Table A1). I assign each coordinate to a district by point-in-polygon overlay with the 2025 administrative boundaries. Where an address also names a district, the two assignments agree in 98.6 percent of cases.

Public institutions provide a comparison group of prominent, centrally located sites. They came from the same queries as the party offices, and I sampled Street View imagery for both groups using the same protocol.

The directory records where organizations were listed in 2024. Opening dates for the offices are unavailable.

4.2 Street View panoramas and expert labels

I adapt the Street View protocol from two studies that sampled Istanbul's street network on a regular grid (Caliskan, 2025; Caliskan et al., 2026). Here, the directory defines the sampling frame. I query Street View at each listed coordinate and at points ten meters away along thirteen bearings, for a total of 379,158 metadata queries. Each query returns the identifier, position, and capture month of the nearest available panorama. I retain imagery from the month of an election and the two preceding months, when campaign

Table 1: Queries and analysis samples

Stage	Count
Party names queried	62
Returned place records	218,894
Unique coordinates	14,583
party organizations	5,928
district organizations	3,575
provincial organizations	968
town organizations	208
campaign offices	90
national headquarters, branches, unspecified	1,087
party-affiliated organizations	110
public institutions	6,363
other places	2,182
Street View probe queries	379,158
Panoramas in election windows	6,609
with expert labels	6,496
matched to metadata and a district	6,495
Sampled coordinates with labeled panoramas	1,974
Districts with labeled panoramas	249
Labeled symbols	17,631
party symbols	13,258
Turkish flags	4,163
Office choice sets (RQ1)	5,928
District-party pairs (RQ2)	12,649
Panorama-party pairs (RQ3)	84,435
District-election-party cells with symbols (RQ4)	1,194

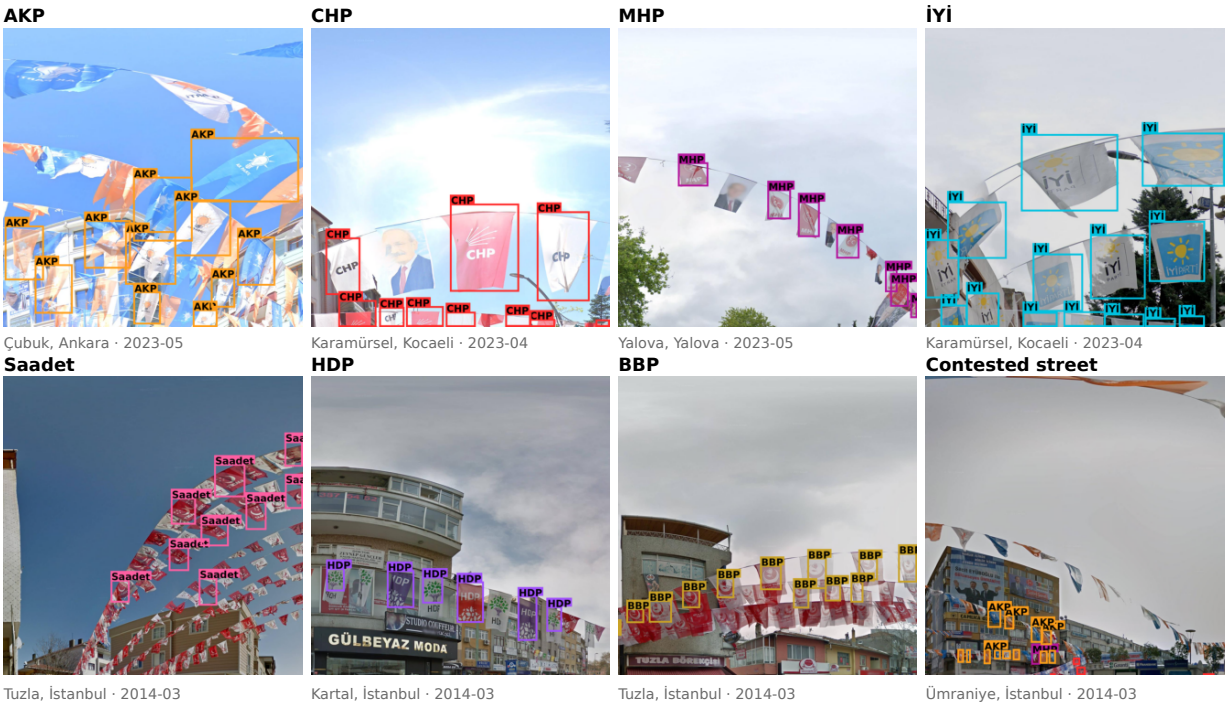

Figure 3: Party symbols in election-period Street View imagery, with the annotators' labels. Each panel shows a panorama tile from near a listed party office and gives the district, province, and capture month. The last panel shows overlapping displays from several parties.

material is likely to be visible. The 6,609 panoramas cover the March 2014 local elections, the August 2014 presidential election, the June 2018 and May 2023 general elections, and the March 2024 local elections.

Expert annotators worked with each panorama in eight tiles. They drew boxes around party flags, banners, posters, and emblems and identified the party in each box. They labeled a flag only when it was fully visible and they could identify the party with confidence. To avoid misclassification, they left partially visible flags unlabeled even when the visible portion resembled a known party flag. They also marked Turkish flags and images of Atatürk. The annotation scheme has 47 classes, most of them parties. I use the class labels as assigned by the annotators. The exported annotation set contains 6,496 panoramas, of which 6,495 can be matched to capture metadata and a district. Figure 3 shows examples.

A small number of symbols were boxed twice. I merge heavily overlapping boxes in the same class. The 18,001 boxes yield 17,631 distinct symbols, including 13,258 party symbols, 4,163 Turkish flags, and 119 images of Atatürk (Table A3).

I group party symbols into thirteen lineages that can be tracked across elections. I record symbols of affiliated movements, such as the nationalist youth organization, separately

from the party symbols in the main analysis. For each panorama, I measure the distance to the nearest listed place of each type and to each party's nearest office. The median labeled panorama is 16 meters from the coordinate that prompted the query, and nine in ten are within 29 meters. The nearest listed place is a party organization for 4,438 labeled panoramas and a public institution for 1,181.

Street View coverage in Turkey is uneven. The election-window imagery covers 1,974 listed coordinates in 249 districts across 50 provinces. Of the labeled panoramas, 80 percent date from 2014 or 2018 (Figure A3). The office-siting and organizational-reach analyses use all 973 districts. The symbol analyses apply to the districts and periods covered by the imagery. The covered districts tend to be more urban than the average district and are disproportionately in western Turkey.

4.3 Elections

District returns come from the Supreme Election Council (Yüksek Seçim Kurulu, 2024). I use returns from eight elections, comprising the municipal council and presidential votes of 2014, both parliamentary elections in 2015, the parliamentary elections of 2018 and 2023, and the municipal council votes of 2019 and 2024. I use council returns to measure party support in local elections because parties that cede a mayoral race to an ally usually still run a council list. I track party lineages across changes in name. From the mayoral results, I code the winning party and margin in each district in 2014, 2019, and 2024. I also use an existing compilation of 88 districts classified as swing districts over the local elections from 2014 to 2024. I match each imagery window to the corresponding election.

4.4 Population, amenities and district characteristics

I measure residential population using the WorldPop constrained 100-meter grid for 2020 (Bondarenko et al., 2020; Stevens et al., 2015). For each location, I count residents within 250, 500, and 1,000 meters. I also compute each district's population-weighted centroid. The OpenStreetMap extract of 19 November 2026 contains 404,982 points of interest in the categories used here and 753,563 kilometers of road in Turkey (OpenStreetMap contributors, 2026). I group amenities into commercial (such as restaurants, cafés, banks, and pharmacies), retail, transit, civic (such as schools, health facilities, post offices, and libraries), places of worship, and community facilities. I use town halls and provincial and district governorship buildings to locate the seat of government. The completeness of volunteered geographic data varies with urbanization (Haklay, 2010; Barrington-Leigh and Millard-Ball, 2017). I therefore compare locations within the same district in all siting

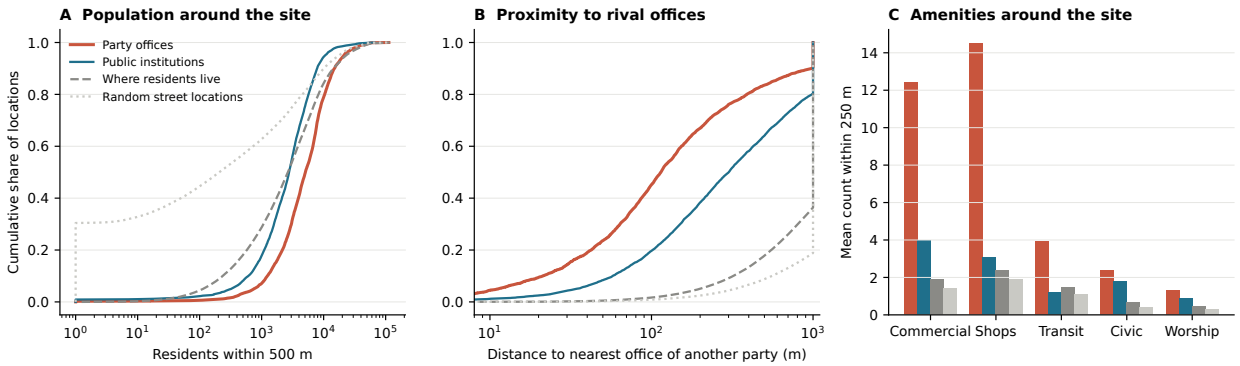

Figure 4: Characteristics of party office locations. Panel A shows the cumulative distribution of residents within 500 meters of party offices, public institutions, resident-weighted locations, and locations drawn from the street network. Panel B shows the distance from each office to the nearest rival office and from each comparison location to the nearest party office. Panel C shows the mean number of amenities within 250 meters.

models and repeat the analysis with earlier extracts. District population for 2025 comes from the official address-based counts (Türkiye İstatistik Kurumu, 2026). The SEGE-2022 index from the Ministry of Industry and Technology measures district development (Sanayi ve Teknoloji Bakanlığı, 2022). All 973 districts match across the boundary file, election returns, population counts, and development index.

4.5 Descriptive patterns

Organizational reach varies widely by party (Figure 2). The AKP is listed in 74 percent of districts, the CHP in 64 percent, and the MHP in 53 percent. Each of the other parties appears in fewer than half the districts, and the newer parties are present in only a small minority.

The median party office has 5,079 residents within 500 meters, compared with 2,660 at the median resident-weighted location (Figure 4 and Table A4). Offices have an average of 12.4 commercial amenities within 250 meters, compared with 1.9 at the resident-weighted locations. The median distance from an office to the nearest rival office is 114 meters.

Among labeled panoramas, 37 percent contain at least one labeled symbol and 22 percent contain a party symbol. A few streets lined with strings of pennants account for dozens of symbols apiece.

5 Empirical Strategy

I use nonexperimental comparisons tailored to each research question. The siting analysis compares offices with other locations in the same district. The reach analysis compares

parties within districts. The street-presence analysis compares parties within the same panorama, and the final analysis relates symbol shares to vote shares within district-elections.

5.1 Siting: offices against available locations

I use a use-availability design, as in studies of firm location and habitat selection (McFadden, 1974; Guimarães et al., 2003; Manly et al., 2002). For each office, I draw 20 control locations from its district under each of two sampling schemes. The first draws locations in proportion to residential population, so that the controls represent where a randomly chosen resident lives. The second draws locations uniformly along the street network to represent addressable locations. The office and its controls form a choice set. I estimate

$$\Pr(\text{office } i \text{ at location } j) = \frac{\exp(x'_{ij}\beta)}{\sum_{k \in C_i} \exp(x'_{ik}\beta)}, \tag{1}$$

where C_i contains the office and its controls. I fit a Poisson regression with choice-set fixed effects, which yields the same coefficients as conditional logit (Guimarães et al., 2003). The covariates in x include the log of residents within 500 meters, log distance to the district's population-weighted centroid, and logged amenity counts by category within 250 meters. I also include log distances to the nearest main road and to the seat of government, and an indicator for whether another party has an office within 250 meters. I standardize continuous covariates and cluster standard errors by district (Cameron and Miller, 2015).

Because amenities are partly a consequence of density, I test H1a in a model that includes only the population variables. I test the amenity and proximity hypotheses (H1b, H1c) conditional on population. With resident-weighted controls, the population coefficient indicates whether the surroundings of offices are denser than those of the typical resident.

I assess clustering in two ways. The coefficient on the rival-office indicator measures proximity to other parties conditional on the remaining covariates. I also compare the observed share of offices with a rival within 250 meters with the share predicted by a model that omits the indicator. That comparison shows how much clustering the model predicts from population, amenities, and administrative geography. Finally, I fit the same models to public institutions, excluding governorships and town halls because they define the seat of government. The public institutions provide a benchmark for the tendency of organizations to locate in district centers.

5.2 Reach: parties within districts

The second analysis uses one observation for each of 13 party lineages in each of 973 districts. The outcome is either an indicator for whether the party has a listed organization in the district or the number of organizations it has there. The baseline model is

$$y_{pd} = \beta \, \text{share}_{pd} + \gamma \, \text{mayor}_{pd} + \alpha_d + \delta_p + \varepsilon_{pd}, \tag{2}$$

with district effects α_d and party effects δ_p. District effects account for characteristics shared by parties in the same district, such as its size, wealth, and the completeness of its map listings. I estimate the relationship from differences among parties within districts. I use vote shares from the March 2024 municipal council election because it is the closest election to the directory snapshot and the only recent election in which all thirteen lineages can be observed. The appendix reports estimates using the 2018 and 2023 parliamentary returns. The incumbency indicator identifies the party that won the district mayoralty in 2019 and thus held it during the five years before the snapshot. I model counts by Poisson pseudo-maximum likelihood (Santos Silva and Tenreyro, 2006; Correia et al., 2020).

Competitiveness varies across districts, so I replace district effects with province effects and district-level controls to test H2c. The controls are the log of eligible voters, the development index, the urban population share, and two measures of map coverage. I measure competitiveness by the winning margin in the 2023 parliamentary election and use the swing-district indicator as a second measure. I also test the incumbency hypothesis using a regression discontinuity in the 2019 mayoral margin. This compares parties that narrowly won with those that narrowly lost (Lee, 2008; Eggers et al., 2015), using bias-corrected inference (Calonico et al., 2014).

The directory gives a single snapshot in 2024. Parties may open offices where they already have support, and a longstanding office may also help a party win votes. I interpret β as an association between organization and electoral support.

5.3 Street presence: parties within panoramas

The third analysis uses one observation per party and labeled panorama. The outcome s_{pi} is the number of symbols of party p in panorama i. The preferred specification is

$$E[s_{pi}] = \exp\left(\beta \, \text{own}_{pi} + \mu_i + \lambda_{p,d(i),e(i)}\right), \tag{3}$$

where own_{pi} indicates that party p has a listed office within 50 meters of panorama i. The panorama effect μ_i accounts for features of the street and the image shared by all parties in

that panorama, such as pedestrian activity, the number of balconies, the season, and the camera. The party-by-district-by-election effect λ accounts for each party's overall level of display in that district and campaign. The coefficient compares a party's display near its own office with its display elsewhere in the district and with the display of other parties in the same panorama. I include parties only in windows in which they existed and cluster standard errors by sampled coordinate.

I replace the 50-meter indicator with distance bands to estimate how the premium changes with distance. In a panorama-level model, I compare panoramas nearest a party office with those nearest a public institution within the same district and election. I also reassign party labels among offices within each district 200 times and re-estimate the preferred model. The resulting distribution provides a benchmark for the own-office coefficient if proximity to any party office accounted for the association (Young, 2019).

To test H3b, I interact the own-office indicator with the party's district vote share at the matched election, an indicator for whether it held the district mayoralty when the panorama was captured, and an indicator for the governing party. For H3c, I restrict the sample to panoramas whose nearest listed place is a party office and model the count of rival symbols as a function of the district's winning margin and the presence of a rival office within 250 meters.

The office directory dates from 2024, and three quarters of the imagery is older. A party office listed at an address in 2024 may have been elsewhere in 2014. This kind of misclassification can dilute the measured association between being near a party's office and seeing its symbols. I report estimates separately by election window, including the two most recent.

5.4 Symbols and votes: parties within district-elections

For the last analysis, I aggregate symbols by party, district, and election window. A party's symbol share is the fraction of all party symbols in the district's labeled panoramas in that window that belong to the party. The model is

$$v_{pde} = \beta \, \text{symshare}_{pde} + \theta_{pe} + \kappa_{de} + \varepsilon_{pde}, \tag{4}$$

where v is the vote share at the matched election, θ_{pe} is a party-by-election effect that accounts for each party's national standing in that election, and κ_{de} is a district-by-election effect. I weight observations by the number of panoramas, require at least ten panoramas per district-window in the main specification, and cluster standard errors by district.

Symbol shares estimated from a few dozen panoramas are noisy, and classical mea-

surement error attenuates β. I split the panoramas in each district-window at random, calculate the shares in each half, and instrument one estimate with the other, following Gillen et al. (2019). The two halves measure the same underlying share. If their sampling errors are uncorrelated, the instrument corrects for attenuation due to sampling.

I test H4b by substituting the change in vote share since the previous comparable election as the outcome. In an alternative model, I retain vote share as the outcome and control for its lagged value. For H4c, I use one observation per district-window and relate the winning margin to the effective number of parties in the symbol mix (Laakso and Taagepera, 1979). I also relate turnout to the number of symbols per panorama. Both models include election and province effects.

5.5 Inference across hypotheses

For each of the twelve hypotheses, I designate a primary test based on the design written before estimation (Appendix F). I report Benjamini-Hochberg adjusted q-values across those twelve tests to account for multiple comparisons (Benjamini and Hochberg, 1995). I count a hypothesis as supported when the estimate has the predicted sign and $q < 0.05$.

6 Results

6.1 Where are the offices?

Table 2 reports the siting models. Figure 5 compares the estimates for party offices and public institutions. In the model with population variables alone (column 1), a one-standard-deviation increase in log population within 500 meters is associated with a 2.24 increase in the log odds of an office (SE 0.21). Because the controls in this model are sampled in proportion to where people live, the estimate means that offices sit in much denser surroundings than the typical resident's home. The estimate for distance to the district's population-weighted center is close to zero. In a large rural district, that center may lie between settlements. The evidence for H1a is limited to local population density.

Columns 2 and 3 show how much the amenity measures account for the density relationship. Adding them reduces the population coefficient by an order of magnitude, and in the full model the coefficient is small and slightly negative. In column 3, the odds of an office are 1.9 times as high for a one-standard-deviation increase in the logged count of commercial amenities within 250 meters. Offices are also more likely near places of worship, transit and civic institutions, and less likely farther from a main road. Once the model accounts for restaurants, banks and pharmacies, the coefficient on shops is small.

Table 2: Where parties site their offices: conditional logit estimates

	(1) Residents	(2) Residents	(3) Residents	(4) Streets	(5) Public inst.
Residents within 500 m (log)	2.241***	0.255**	-0.159*	2.407***	-0.080
	(0.211)	(0.112)	(0.085)	(0.172)	(0.068)
Distance to population center (log)	-0.008	-0.030	0.022	0.094	-0.358***
	(0.053)	(0.050)	(0.048)	(0.058)	(0.041)
Commercial amenities, 250 m		1.007***	0.625***	0.526***	0.251***
		(0.041)	(0.035)	(0.037)	(0.025)
Shops, 250 m		0.094**	0.048	0.056*	-0.147***
		(0.037)	(0.034)	(0.032)	(0.026)
Transit, 250 m		0.205***	0.099***	0.156***	0.074***
		(0.040)	(0.035)	(0.035)	(0.026)
Civic institutions, 250 m		0.195***	0.077***	0.108***	0.378***
		(0.028)	(0.025)	(0.026)	(0.021)
Places of worship, 250 m		0.398***	0.264***	0.186***	0.080***
		(0.025)	(0.024)	(0.026)	(0.019)
Distance to main road (log)		-1.057***	-1.005***	-0.388***	-0.868***
		(0.036)	(0.036)	(0.039)	(0.027)
Distance to seat of government (log)			-0.480***	-0.399***	-0.895***
			(0.045)	(0.048)	(0.047)
Party office within 250 m			1.984***	1.996***	0.592***
			(0.068)	(0.070)	(0.055)
Control locations	Residents	Residents	Residents	Streets	Residents
Sites	Party	Party	Party	Party	Public
Choice-set fixed effects	Yes	Yes	Yes	Yes	Yes
Observations	124,488	124,488	124,488	124,488	119,931

Note. Each office is compared with 20 control locations drawn in its own district, either in proportion to where residents live or along the street network. Estimates come from Poisson models with choice-set fixed effects, which reproduce the conditional logit likelihood. Continuous covariates are standardized; amenity counts enter as logs of one plus the count. Column 5 repeats the specification for public institutions other than the governorship and the municipality; for these sites the last row indicates any party office within 250 m. Standard errors clustered by district in parentheses. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

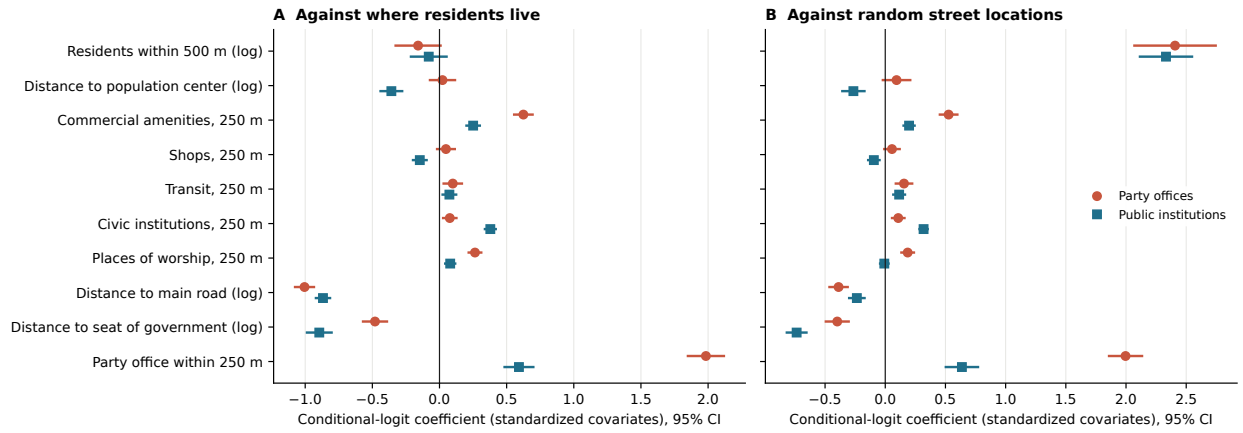

Figure 5: Predictors of party office and public institution locations. Conditional logit coefficients on standardized covariates with 95 percent confidence intervals, from column 3 of Table 2 and the corresponding specifications. Panel A uses controls sampled in proportion to residential population. Panel B uses controls drawn along the street network. For public institutions, the last row indicates any party office within 250 meters.

These estimates support H1b. With controls sampled from the street network (column 4), the population coefficient remains large. Many of those controls are on roads where nobody lives. The associations with amenities and main roads are similar across the two control samples.

Offices tend to be near both the seat of government and rival parties. For a one-standard-deviation increase in log distance to the seat of government, the odds of an office are multiplied by 0.6. With a rival office within 250 meters, the odds are 7.3 times as high (95 percent confidence interval 6.4 to 8.3). Rival proximity has the largest coefficient in the model. In the directory, 72 percent of party offices have a rival within 250 meters. A model with every covariate except the rival indicator predicts 30 percent with resident-weighted controls and 20 percent with street controls. The resident-weighted model thus leaves a gap of about 42 percentage points (bootstrap interval 40 to 44). The proximity estimates support H1c.

Public institutions also tend to be near main roads and cluster even more closely around the seat of government (column 5 and Figure 5). They are closer than party offices to the district's population center, and their locations are more strongly associated with civic amenities such as schools and clinics than with commercial amenities. Public institutions are also more likely than control locations to have a party office nearby, though the coefficient is less than a third of the corresponding estimate for party offices. What distinguishes party offices is how closely they cluster around commercial amenities and around one another.

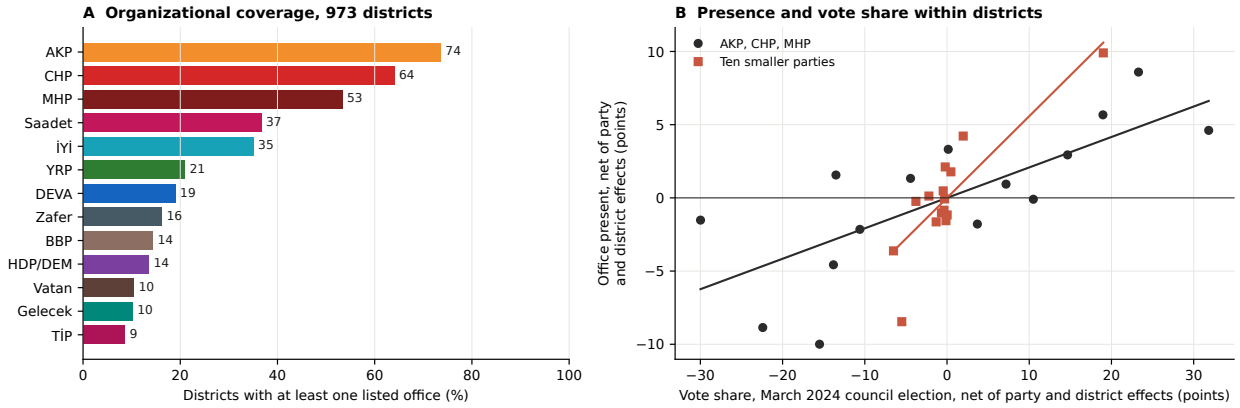

Figure 6: Organizational reach. Panel A shows the share of the 973 districts in which each party lineage has at least one listed organization. Panel B shows binned means of organizational presence against the party's vote share in the March 2024 council election. Party and district effects are removed from both measures. The panel shows the three largest parties and the ten smaller lineages separately, with fitted lines for each group.

Party-by-party estimates (Figure A8) show broadly the same ordering of coefficients. Proximity to the seat of government is an exception for parties of the Kurdish movement. Their offices are no closer to it than the control locations, a pattern consistent with their adversarial relationship with the appointed administration. The coefficient on places of worship is largest for the Islamist Saadet Party.

6.2 How are the parties organized?

Figure 6 and Table 3 compare parties within districts. A party with a vote share ten percentage points higher is 3.2 percentage points more likely to have a listed organization in the same district (column 1). As H2a predicts, the association is stronger for smaller parties. A ten-point difference in vote share corresponds to 1.7 points in the probability of a listing for the AKP, CHP and MHP, and 5.7 points for the ten smaller lineages (column 2). The count model in column 3 also shows a positive association. Among parties that can be observed in the 2018 or 2023 parliamentary elections, the estimates are larger, between five and six points in the probability of a listing per ten points of vote share (Table A7).

The estimates provide little evidence that holding the mayoralty is associated with a party's organizational reach. After accounting for vote share, a party that won the district mayoralty in 2019 and governed for the five years before the directory was compiled is 0.8 percentage points more likely to have an office, with a standard error of 1.9 points. Using the 2024 winner gives a small negative estimate. The regression discontinuity likewise gives an imprecise estimate. Parties that narrowly won the mayoralty in 2019 have 0.11

Table 3: How are the parties organized?: district-by-party estimates

	(1) Presence	(2) Presence	(3) Offices	(4) Presence	(5) Presence
Vote share, 2024	0.316***	0.169***	0.675***	0.316***	0.329***
	(0.043)	(0.053)	(0.134)	(0.043)	(0.046)
Vote share × smaller party		0.404***			
		(0.082)			
Held district mayoralty, 2019–24	0.008	0.022	0.033	0.008	0.008
	(0.019)	(0.019)	(0.042)	(0.019)	(0.019)
Winning margin, 2023				-0.049*	-0.056
				(0.030)	(0.039)
Swing district				0.011	0.011
				(0.011)	(0.011)
Close district (margin < 10)					0.000
					(0.013)
Vote share × close district					-0.046
					(0.060)
Eligible voters (log)				0.097***	0.097***
				(0.006)	(0.006)
Development index (SEGE)				0.066***	0.066***
				(0.011)	(0.011)
Non-party listings (log)				-0.024***	-0.024***
				(0.007)	(0.007)
Estimator	OLS	OLS	Poisson	OLS	OLS
Party effects	Yes	Yes	Yes	Yes	Yes
District effects	Yes	Yes	Yes	No	No
Province effects	No	No	No	Yes	Yes
Observations	12,649	12,649	11,791	12,649	12,649

Note. The unit is a district-party pair for 13 parties in 973 districts. Presence equals one if the party has at least one listed organization in the district; Offices is their number. Vote share is the party's share of valid votes in the March 2024 municipal council election. Columns 4 and 5 also control for the urban population share and OpenStreetMap completeness. Standard errors clustered by district in parentheses. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

more listed offices than parties that narrowly lost ($p = 0.408$, Figure A9).

Conditional on vote share, there is little evidence that parties are more likely to have an office where the winning margin is narrow (column 4) or in the 88 swing districts. The association between a party's vote share and its organizational presence is also similar in close districts (column 5). Parties are more likely to have a listed office in districts with more voters and higher development scores.

The pattern fits a core-voter account of party organization, in which parties maintain offices where they already have support. There is little evidence here of a strategy of locating offices in marginal districts. Parties might also earn more votes in places where they have long been organized. A single snapshot of the directory cannot tell us which comes first.

6.3 Who holds the street?

Figure 7 shows whose symbols appear around whose offices. Each row groups labeled panoramas taken within 50 meters of an office of the named party, and each column gives the percentage of those panoramas showing a particular party's symbols. The largest shares generally lie along the diagonal. On average, a party's symbols appear in 21 percent of panoramas near its own offices and 2 percent of those near other parties' offices. Party symbols are uncommon near public institutions, which appear in the bottom row. Overall, 7 percent of panoramas whose nearest listed site is a public institution contain any party symbol, compared with 28 percent of those whose nearest site is a party office.

The preferred model compares parties within each panorama while accounting for each party's overall level of display in the district and election (Table 4, column 2). The coefficient on an own office within 50 meters is 3.73 (SE 0.33). The estimate corresponds to a rate ratio of about 41.5, with a 95 percent confidence interval of 21.7 to 79.4. The linear probability model (column 3) estimates a 22-percentage-point difference in the probability of seeing at least one of the party's symbols, based on 56,802 panorama-party observations. The model with less restrictive fixed effects in column 1 also shows that a party's symbols are less common near another party's office than elsewhere. The estimates support H3a.

The premium falls with distance (column 4 and Figure 8, Panel A). Compared with panoramas with no own office within 250 meters, the expected count of a party's symbols is about 101 times as high within 30 meters of its office, 14.4 times as high between 30 and 50 meters, 5.0 times as high between 50 and 100 meters and 2.3 times as high between 100 and 250 meters. The displays are most concentrated just outside the office and thin out over two or three blocks. The premium is present for every party with enough offices in the imagery to estimate it (Panel B). Relative to each party's usual level of display, it is

Table 4: Who controls the street around the office: panorama-by-party estimates

	(1) Count	(2) Count	(3) Any	(4) Count	(5) Count	(6) Rival count
Own office within 50 m	2.585***	3.727***	0.221***		3.857***	
	(0.229)	(0.330)	(0.011)		(0.409)	
Other party's office within 50 m	-1.084***					
	(0.363)					
Own office 0–30 m				4.615***		
				(0.530)		
Own office 30–50 m				2.667***		
				(0.562)		
Own office 50–100 m				1.611***		
				(0.449)		
Own office 100–250 m				0.852**		
				(0.429)		
Own office × vote share					-5.333	
					(3.257)	
Own office × holds mayoralty					0.124	
					(2.164)	
Own office × governing party					-0.149	
					(1.504)	
Winning margin						-0.611
						(1.463)
Rival office within 250 m						0.258
						(0.353)
Own vote share						0.802
						(1.182)
Estimator	Poisson	Poisson	OLS	Poisson	Poisson	Poisson
Panorama effects	Yes	Yes	Yes	Yes	Yes	No
Party × election effects	Yes					
Party × district × election	No	Yes	Yes	Yes	Yes	No
Party, election, province effects						Yes
Observations	11,752	6,004	56,802	6,004	4,263	1,903

Note. Columns 1 to 5: the unit is a panorama-party pair and the outcome is the number of the party's symbols in the panorama (Any: at least one). Poisson models drop pairs whose fixed-effect groups have no variation. Column 6: panoramas whose nearest place is an office of the party; the outcome is the number of other parties' symbols. Standard errors clustered by sampled coordinate in parentheses. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

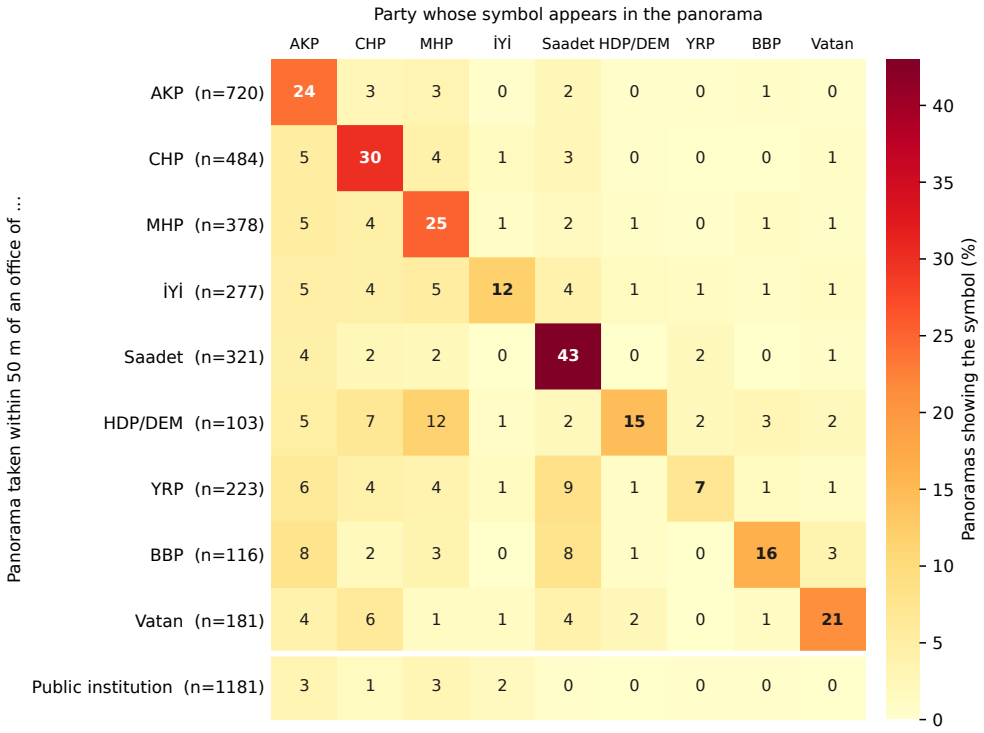

Figure 7: Whose symbols surround whose office. Each row groups labeled panoramas within 50 meters of an office of the named party, with a separate row for panoramas whose nearest listed site is a public institution. Each cell gives the percentage of panoramas in that row showing at least one symbol of the party named in the column.

smallest for the AKP and CHP, whose flags are also common away from their offices, and largest for smaller parties whose symbols rarely appear elsewhere.

The distance bands suggest that the pattern extends beyond office signboards. The relationship also depends on which party occupies the office. When I shuffle party labels among offices within each district, the coefficient averages 0.08 and never exceeds 0.96 across 200 permutations, compared with 3.73 using the observed labels (Figure A10). Public institutions sampled in the same way provide another comparison. Within districts and election windows, panoramas whose nearest site is a party office show 4.4 times as many party symbols as those whose nearest site is a public institution. They are also 21 percentage points more likely to show any party symbol. I find no statistically discernible difference in the number of Turkish flags at the two kinds of site.

In column 5, the interaction between a party's local vote share and proximity to its own office is negative and imprecise. The interactions with holding the mayoralty and with being the governing party are close to zero. The linear probability model gives a positive interaction for mayoral incumbents and a negative one for the governing party, both statistically significant (Table A8). The corresponding count estimates give little evidence

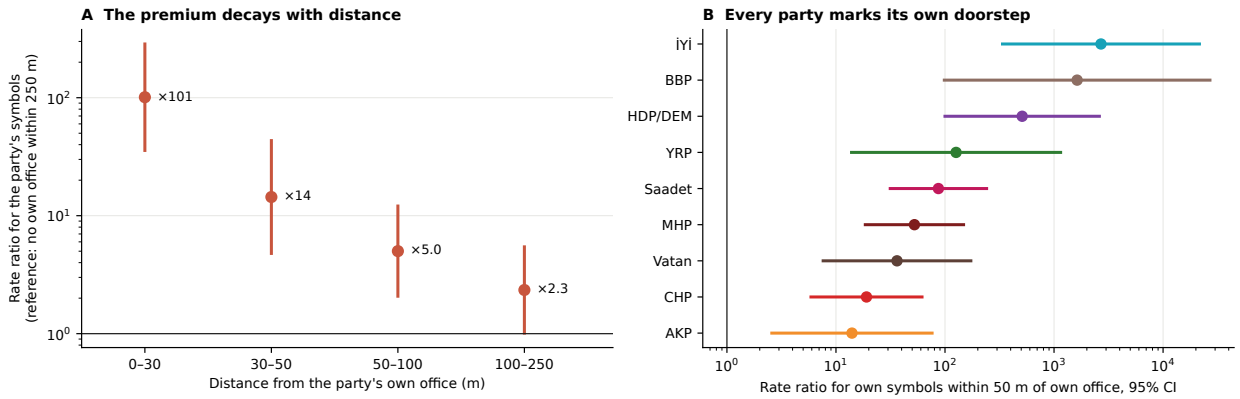

Figure 8: The home-turf premium. Panel A shows rate ratios for a party's symbol count by distance to the nearest office of that party, relative to panoramas with no own office within 250 meters (column 4 of Table 4). Panel B shows party-specific rate ratios for an own office within 50 meters. Bars give 95 percent confidence intervals. The rate-ratio axis is logarithmic in each panel.

of an association for either group. Taken together, the estimates offer little evidence for H3b, which predicts a stronger home-turf premium for electorally stronger parties or incumbents. Even a small branch may be able to decorate its own frontage. Differences in resources may matter more for how far a party's displays extend beyond the office.

Among panoramas near a party office, the number of rival symbols bears little relation to the district's winning margin (column 6). A rival office within 250 meters is associated with a 4.6-percentage-point increase in the probability of seeing a rival symbol, though the estimate for the rival symbol count is imprecise. The primary test gives no support for H3c. In an exploratory analysis, the party's own symbols at its office are about 1.8 times as numerous when a rival office is within 250 meters. The clearer association with a nearby competitor is therefore in the party's own display.

6.4 Symbols and votes

Table 5 and Figure 9 compare each party's share of the symbols around a district's offices with its share of the vote. The analysis includes 1,194 party-by-district-by-window observations across 177 district-windows. Of these, 771 observations across 126 district-windows are based on at least ten panoramas. In the preferred model (column 2), a ten-percentage-point difference in a party's symbol share corresponds to a 0.80-percentage-point difference in vote share (SE 0.23), after accounting for party-by-election and district-by-election effects. A one-standard-deviation difference in symbol share (29 points) corresponds to 2.3 points in vote share. The estimate from the split-sample instrument is similar (0.85 in column 3), suggesting that the small slope is unlikely to be due to sampling noise in the symbol

shares. The positive association supports H4a.

Table 5: Symbols and votes: district-level estimates

	(1) Vote share	(2) Vote share	(3) Vote share	(4) Vote share	(5) Change	(6) Margin	(7) Turnout
Symbol share	0.083***	0.080***	0.085**	0.046**	0.030		
	(0.021)	(0.023)	(0.037)	(0.022)	(0.023)		
Lagged vote share				0.715***			
				(0.062)			
Effective number of symbol parties						0.006	
						(0.025)	
Symbols per panorama (log)						0.026	-0.002
						(0.033)	(0.003)
Estimator	OLS	OLS	IV	OLS	OLS	OLS	OLS
Minimum panoramas	1	10	10	10	10	10	10
Party × election effects	Yes	Yes	Yes	Yes	Yes		
District × election effects	Yes	Yes	Yes	Yes	Yes		
Election and province effects						Yes	Yes
Observations	1,194	771	590	537	537	114	132

Note. Columns 1 to 5: the unit is a party in a district-election; symbol share is the party's share of all party symbols observed around offices in that district and window. Column 3 instruments the share computed from a random half of the district's panoramas with the share from the other half. Column 5 uses the change from the previous comparable election. Columns 6 and 7: the unit is a district-election, and the models also control for the log number of eligible voters. Observations are weighted by the number of panoramas. Standard errors clustered by district in parentheses. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

The association is stronger in some elections than in others. The estimates for the 2014 and 2024 local elections are 0.89 and 1.38, respectively, though both are imprecise. The coefficient is 1.36 in the 2014 presidential election. In the 2018 and 2023 general elections, it is 0.12 and 0.25, respectively, and neither estimate is statistically distinguishable from zero (Table A9). The 2014 presidential election, in which the CHP and MHP backed the same candidate, contributes disproportionately to the pooled estimate. Excluding it brings the estimate to 0.41. Symbol shares observed in one window are about as closely associated with vote shares in other elections as with vote shares in the matched election (Figure A12). This persistence suggests that the symbols reflect the district's longer-term partisan composition.

A ten-point difference in symbol share corresponds to a 0.30-point change in vote share since the previous comparable election (column 5). The estimate is statistically indistinguishable from zero. After controlling for lagged vote share, symbol share retains a small positive association with current vote share (0.46 in column 4). In the 104 party-district cells observed in more than one window, I find no relationship between changes in symbol share and changes in vote share. The results offer no support for H4b.

The estimates also provide little evidence for H4c. A more even mix of symbols is not associated with a smaller winning margin (column 6). The turnout coefficient is -

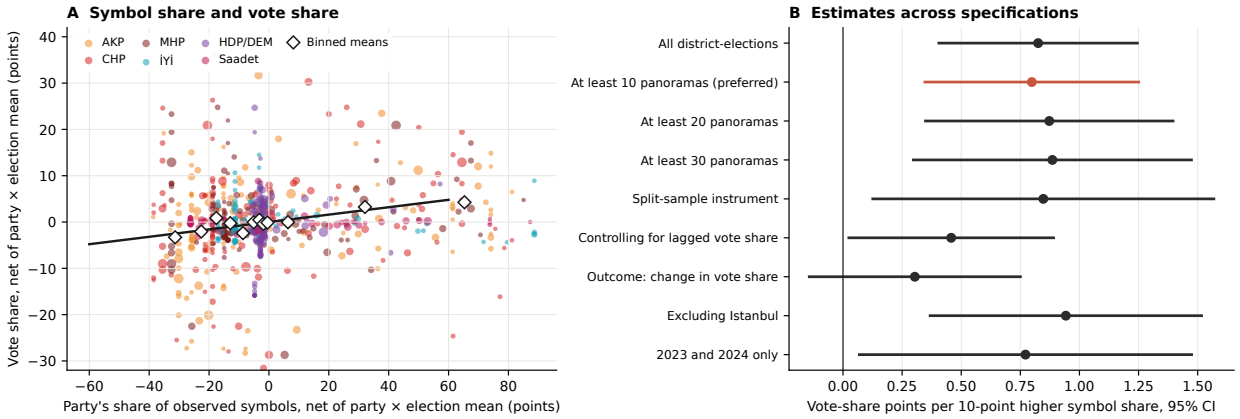

Figure 9: Symbol shares and vote shares. Panel A plots a party's vote share against its share of symbols around offices in the district and window, with party-by-election means removed from both. Marker size is proportional to the number of panoramas. Diamonds mark binned means and the line shows the weighted linear fit. Panel B shows the symbol-share coefficient under alternative samples and specifications, in vote-share points per ten points of symbol share, with 95 percent confidence intervals.

0.17 percentage points per log unit of symbols per panorama, and is small relative to its standard error (column 7). The turnout result is consistent with earlier findings for Istanbul (Caliskan, 2025).

6.5 Summary and robustness checks

Table 6 reports the twelve primary tests. Six hypotheses meet the criterion for support after adjustment for multiple testing. The supported predictions concern office siting (three hypotheses), the link between electoral strength and organizational reach, the home-turf premium and the association between symbol shares and vote shares. The tests give no support for the hypotheses on incumbency, competitiveness, the strength gradient of the premium, contestation, electoral change or closeness.

The appendix reports the robustness checks specified before estimation. For siting (Tables A5 and A6), the main patterns hold with amenity buffers of 100 and 500 meters, the strict office classification and five controls per office. They also hold outside Istanbul, in metropolitan and non-metropolitan provinces separately, when the sample is limited to district and provincial branches, and when using OpenStreetMap extracts from 2014 and 2018. The older extracts contain a small fraction of the amenities mapped today. With those extracts, the commercial amenity coefficient is smaller and the residual population coefficient remains positive. The coefficients for roads, the seat of government and rival offices are stable across all three vintages. For organizational reach (Table A7), the vote-

Table 6: Primary hypotheses: estimates and multiple-testing adjustment

	Hypothesis	Primary test	Est.	SE	p	q	Verdict
H1a	Population centrality	Conditional logit, residents within 500 m	2.241	0.211	<0.001	<0.001	Supported
H1b	Amenity environment	Conditional logit, commercial amenities	0.625	0.035	<0.001	<0.001	Supported
H1c	State and rivals	Conditional logit, rival office within 250 m	1.984	0.068	<0.001	<0.001	Supported
H2a	Electoral strength	District and party effects, vote share	0.316	0.043	<0.001	<0.001	Supported
H2b	Local incumbency	District and party effects, mayoralty	0.008	0.019	0.676	0.738	Not supported
H2c	Competitiveness	Province and party effects, margin	-0.049	0.030	0.100	0.152	Not supported
H3a	Home turf	Poisson, own office within 50 m	3.727	0.330	<0.001	<0.001	Supported
H3b	Strength gradient	Poisson, own office × vote share	-5.333	3.257	0.102	0.152	Not supported
H3c	Contestation	Poisson, rival symbols on margin	-0.611	1.463	0.676	0.738	Not supported
H4a	Levels	Party-election effects, symbol share	0.080	0.023	<0.001	0.002	Supported
H4b	Change	Change in vote share on symbol share	0.030	0.023	0.185	0.247	Not supported
H4c	Closeness	Margin on effective number of symbol parties	0.006	0.025	0.799	0.799	Not supported

Note. The table reports one primary test per hypothesis. I use the Benjamini–Hochberg procedure to adjust the p-values across all twelve tests. I count a hypothesis as supported if the estimate has the predicted sign and the adjusted p-value (q) is below 0.05.

share coefficient is stable when I add listings from the second collection, apply the strict classification, exclude Istanbul or cluster standard errors by province.

The home-turf coefficient (Table A8) ranges from 3.10 to 5.46 across the five election windows estimated separately. It is 5.37 in the pooled 2023 and 2024 windows, when the directory is most likely to reflect where offices were at the time the panoramas were taken. The estimate changes little when I use radii of 30 or 100 meters, apply the strict classification or exclude the one percent of panoramas with the most symbols. It is larger when I exclude Istanbul. Omitting one province at a time yields estimates from 3.62 to 5.16.

The symbol-share coefficient (Table A9) is similar with thresholds of 5, 20 or 30 panoramas per district-window, with weights removed and with the three largest cities excluded. The positive association also holds when I replace the share of symbols with the share of panoramas showing the party, or fit a fractional logit. Leaving out one province at a time gives estimates between 0.60 and 0.94 vote-share points per ten points of symbol share.

7 Discussion

7.1 What the address reveals

In a typical district, the parties with offices are within a few minutes' walk of one another. Their offices are on or just off the main commercial street and near the government building. If parties chose locations simply to reduce the cost of reaching their own supporters, I would expect their offices to be more dispersed. The observed pattern makes sense if an office signals a party's presence to the whole town. Its most visible location is where people shop, bank and deal with the authorities. Proximity to a rival office has the largest coefficient in the model, and the estimate varies little across parties. Parties that differ in other respects seem to agree on where an office belongs.

There are two plausible explanations for this clustering. A party that opens an office away from its competitors gives up the chance to be seen alongside them, much as a firm that leaves the high street loses passing trade (Hotelling, 1929). Parties may also be choosing from the same small stock of affordable upper-floor units with street-facing facades, sometimes renting from the same landlords in succession. The fact that parties display more of their own symbols when a rival office is nearby lends some support to the strategic explanation. Following office openings and closures over time would help distinguish the two mechanisms.

7.2 Organization, support and incumbency

The AKP has more listed offices and is present in more districts than any other party. Within districts, local vote share predicts which parties have offices. Holding the mayoralty and the closeness of the race add little to that prediction. I find no clear evidence of an incumbency advantage in either the mayoralty coefficient or the comparison of narrow winners and losers in 2019. Municipal resources in Turkey may well serve partisan ends (Kemahlıoğlu, 2012; Marschall et al., 2016). Party premises, however, cost little relative to the resources a municipality controls and are already within reach of parties of any size.

Research on U.S. campaigns shows that parties place temporary field offices where they hope to win marginal votes (Darr and Levendusky, 2014). I find no comparable pattern for permanent district branches in Turkey. Parties are legally required to organize broadly, a year-round office brings fixed costs, and branches give existing members a place to meet. All three considerations help explain why offices are more common where parties already have support. In comparative work that uses branch counts as a measure of party strength (Tavits, 2013), the counts can serve as a proxy for where voters are. Inferring where a party

hopes to expand would require other evidence.

7.3 Territory at short range

Within 30 meters of its office, a party's estimated symbol count is roughly two orders of magnitude higher than at locations with no office of its own within 250 meters. Between 100 and 250 meters, the factor is about two. Much of the display in Turkish district centers marks the premises and the street immediately outside. The U.S. yard-sign studies describe a more dispersed pattern, with signs at the homes of individual supporters (Makse and Sokhey, 2014). In Turkey, the concentration around offices makes the location of a party's branches especially useful for understanding where its symbols appear.

I expected a larger premium for parties with more votes or control of the municipality. One possible explanation for the lack of a systematic difference is that even a small branch can decorate its facade and the street in front of it. Better-resourced parties may devote their resources to streets away from their offices, which this design cannot assess. The citywide grid used in the Istanbul studies is better suited to measuring that kind of display (Caliskan et al., 2026). The two sampling frames could be combined to examine how far beyond their offices parties display their symbols.

7.4 What symbols say about votes

Around party offices, a party's share of the symbols is related to its share of the district vote. The estimate changes little after correcting for sampling noise, and the coefficient is unchanged when I control for the share of panoramas taken next to the party's own office (Table A9). The association is modest and comes mainly from the local elections and the 2014 presidential contest. Symbol shares are about as strongly associated with vote shares in elections years away as with vote shares in the election for which they were recorded, and they tell us little about how support changes. Party symbols are scarce in panoramas whose nearest listed place is a public institution or another non-party site. In those panoramas, symbol shares show no association with vote shares.

The results suggest that symbols reflect an established local organization. This interpretation is consistent with experiments that find small effects of signs and other campaign stimuli on vote choice (Green et al., 2016; Kalla and Broockman, 2018). The present design cannot establish whether display affects voting. What the imagery does provide is a relatively inexpensive measure of local partisan presence that can be compared across parties and collected independently of official reporting. The evidence offers little basis for using it to forecast changes in support.

7.5 Limitations

The directory provides a single snapshot. It gives no opening dates and misses offices that moved or closed before 2024. I therefore cannot determine whether organization precedes electoral support or follows it. There is also a mismatch between the 2024 directory and the panoramas, most of which date from 2014 and 2018. In some cases, the analysis may treat a location as an office before it opened. That misclassification would tend to weaken the home-turf estimates, and the larger coefficient in the most recent windows is consistent with that possibility. Offices that were already in use in 2014 contribute to the estimates only if their addresses still appear in the directory a decade later.

The completeness of map listings may vary by party and district in ways that fixed effects only partly account for. Where a party is strong, its office may be more likely to be listed, reviewed and correctly named. That would inflate the estimated association between presence and votes. A natural benchmark would be the organizational records parties file with the Chief Public Prosecutor's Office of the Court of Cassation. Those records are unavailable in a form that allows them to be matched to addresses.

The imagery is limited to streets Google's vehicles photographed in the months before five elections. The symbol analyses cover 249 districts and are concentrated in large western cities. Istanbul accounts for 34 percent of the labeled panoramas, and the district-level analysis of votes covers 114 districts. Capture dates are available only to the month. The amenity data also depend on uneven contributions from volunteers. Within-district comparisons account for differences in mapping effort across districts, though coverage may still vary within a district.

8 Conclusion

Party offices make local organization visible. In Turkey, they cluster on commercial streets and near rival offices. Parties are more likely to have a listed office where they have more votes, and I find no comparable association with municipal incumbency or electoral competitiveness. The parties' symbols are most concentrated just outside their own offices, and that concentration fades within a few hundred meters. The mix of symbols around offices reflects the district's existing vote shares and offers little indication of how they will change.

The same approach could be used elsewhere if party addresses and street imagery are available. The addresses provide a sampling frame independent of official organizational statistics, and human annotation avoids relying on an automated classifier to identify symbols. A directory with dated openings and closures would allow researchers to ask

whether changes in organization precede electoral shifts, whether parties respond to one another's moves, and whether losing office changes where a party can afford to maintain a branch.

References

Auyero, J. (2000). *Poor People's Politics: Peronist Survival Networks and the Legacy of Evita*. Duke University Press, Durham, NC.

Barrington-Leigh, C. and Millard-Ball, A. (2017). The world's user-generated road map is more than 80% complete. *PLoS ONE*, 12(8):e0180698.

Baykan, A. and Hatuka, T. (2010). Politics and culture in the making of public space: Taksim Square, 1 May 1977, Istanbul. *Planning Perspectives*, 25(1):49–68.

Baykan, T. S. (2018). *The Justice and Development Party in Turkey: Populism, Personalism, Organization*. Cambridge University Press, Cambridge.

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

Billig, M. (1995). *Banal Nationalism*. Sage, London.

Bondarenko, M., Kerr, D., Sorichetta, A., and Tatem, A. J. (2020). Census/projection-disaggregated gridded population datasets for 189 countries in 2020 using built-settlement growth model (BSGM) outputs. WorldPop, University of Southampton. doi:10.5258/SOTON/WP00684.

Brighenti, A. (2007). Visibility: A category for the social sciences. *Current Sociology*, 55(3):323–342.

Caliskan, C. (2025). The politics of visibility: Party symbols, alliances, and electoral returns in Istanbul's mahalles. Unpublished manuscript. Available at `https://ssrn.com/abstract=5369441`.

Caliskan, C., Ren, Y., Yao, Y., Zhang, Z., Jiang, Q., and Yan, Y. (2026). Political symbols and urban amenities: The spatial logic of flag placement in Istanbul. Unpublished manuscript. Available at `https://ssrn.com/abstract=6727981`.

Calonico, S., Cattaneo, M. D., and Titiunik, R. (2014). Robust nonparametric confidence intervals for regression-discontinuity designs. *Econometrica*, 82(6):2295–2326.

Cameron, A. C. and Miller, D. L. (2015). A practitioner's guide to cluster-robust inference. *Journal of Human Resources*, 50(2):317–372.

Çınar, A. (2005). *Modernity, Islam, and Secularism in Turkey: Bodies, Places, and Time*. University of Minnesota Press, Minneapolis.

Çınar, K. (2016). Local determinants of an emerging electoral hegemony: The case of Justice and Development Party (AKP) in Turkey. *Democratization*, 23(7):1216–1235.

Coppock, A., Hill, S. J., and Vavreck, L. (2020). The small effects of political advertising are small regardless of context, message, sender, or receiver: Evidence from 59 real-time randomized experiments. *Science Advances*, 6(36):eabc4046.

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

Cox, G. W. and McCubbins, M. D. (1986). Electoral politics as a redistributive game. *Journal of Politics*, 48(2):370–389.

Darr, J. P. and Levendusky, M. S. (2014). Relying on the ground game: The placement and effect of campaign field offices. *American Politics Research*, 42(3):529–548.

Dixit, A. and Londregan, J. (1996). The determinants of success of special interests in redistributive politics. *Journal of Politics*, 58(4):1132–1155.

Duranton, G. and Overman, H. G. (2005). Testing for localization using micro-geographic data. *Review of Economic Studies*, 72(4):1077–1106.

Duverger, M. (1954). *Political Parties: Their Organization and Activity in the Modern State*. Methuen, London.

Edelman, M. (1964). *The Symbolic Uses of Politics*. University of Illinois Press, Urbana.

Eggers, A. C., Fowler, A., Hainmueller, J., Hall, A. B., and Snyder, J. M. (2015). On the validity of the regression discontinuity design for estimating electoral effects: New evidence from over 40,000 close races. *American Journal of Political Science*, 59(1):259–274.

Ellison, G. and Glaeser, E. L. (1997). Geographic concentration in U.S. manufacturing industries: A dartboard approach. *Journal of Political Economy*, 105(5):889–927.

Esen, B. and Gumuscu, S. (2016). Rising competitive authoritarianism in Turkey. *Third World Quarterly*, 37(9):1581–1606.

Esen, B. and Gumuscu, S. (2019). Killing competitive authoritarianism softly: The 2019 local elections in Turkey. *South European Society and Politics*, 24(3):317–342.

Ewing, R. and Cervero, R. (2010). Travel and the built environment: A meta-analysis. *Journal of the American Planning Association*, 76(3):265–294.

Gillen, B., Snowberg, E., and Yariv, L. (2019). Experimenting with measurement error: Techniques with applications to the Caltech cohort study. *Journal of Political Economy*, 127(4):1826–1863.

Green, D. P., Krasno, J. S., Coppock, A., Farrer, B. D., Lenoir, B., and Zingher, J. N. (2016). The effects of lawn signs on vote outcomes: Results from four randomized field experiments. *Electoral Studies*, 41:143–150.

Guimarães, P., Figueiredo, O., and Woodward, D. (2003). A tractable approach to the firm location decision problem. *Review of Economics and Statistics*, 85(1):201–204.

Haklay, M. (2010). How good is volunteered geographical information? a comparative study of OpenStreetMap and Ordnance Survey datasets. *Environment and Planning B: Planning and Design*, 37(4):682–703.

Hillier, B., Penn, A., Hanson, J., Grajewski, T., and Xu, J. (1993). Natural movement: Or, configuration and attraction in urban pedestrian movement. *Environment and Planning B: Planning and Design*, 20(1):29–66.

Hotelling, H. (1929). Stability in competition. *The Economic Journal*, 39(153):41–57.

Kalla, J. L. and Broockman, D. E. (2018). The minimal persuasive effects of campaign contact in general elections: Evidence from 49 field experiments. *American Political Science Review*, 112(1):148–166.

Katz, R. S. and Mair, P. (1995). Changing models of party organization and party democracy: The emergence of the cartel party. *Party Politics*, 1(1):5–28.

Kemahlıoğlu, Ö. (2012). *Agents or Bosses? Patronage and Intra-Party Politics in Argentina and Turkey*. ECPR Press, Colchester.

Kumbaracıbaşı, A. C. (2009). *Turkish Politics and the Rise of the AKP: Dilemmas of Institutionalization and Leadership Strategy*. Routledge, London.

Laakso, M. and Taagepera, R. (1979). "Effective" number of parties: A measure with application to West Europe. *Comparative Political Studies*, 12(1):3–27.

Laebens, M. G. and Öztürk, A. (2021). Partisanship and autocratization: Polarization, power asymmetry, and partisan social identities in Turkey. *Comparative Political Studies*, 54(2):245–279.

Lee, D. S. (2008). Randomized experiments from non-random selection in U.S. House elections. *Journal of Econometrics*, 142(2):675–697.

Levitsky, S. (2003). *Transforming Labor-Based Parties in Latin America: Argentine Peronism in Comparative Perspective*. Cambridge University Press, Cambridge.

Makse, T. and Sokhey, A. E. (2014). The displaying of yard signs as a form of political participation. *Political Behavior*, 36(1):189–213.

Manly, B. F. J., McDonald, L. L., Thomas, D. L., McDonald, T. L., and Erickson, W. P. (2002). *Resource Selection by Animals: Statistical Design and Analysis for Field Studies*. Kluwer, Dordrecht, 2 edition.

Marschall, M., Aydogan, A., and Bulut, A. (2016). Does housing create votes? explaining the electoral success of the AKP in Turkey. *Electoral Studies*, 42:201–212.

Masket, S. E. (2009). Did Obama's ground game matter? the influence of local field offices during the 2008 presidential election. *Public Opinion Quarterly*, 73(5):1023–1039.

McFadden, D. (1974). Conditional logit analysis of qualitative choice behavior. In Zarembka, P., editor, *Frontiers in Econometrics*, pages 105–142. Academic Press, New York.

Mehta, V. (2007). Lively streets: Determining environmental characteristics to support social behavior. *Journal of Planning Education and Research*, 27(2):165–187.

Navaro-Yashin, Y. (2002). *Faces of the State: Secularism and Public Life in Turkey*. Princeton University Press, Princeton.

OpenStreetMap contributors (2026). OpenStreetMap data extracts for Turkey. Geofabrik download server, `https://download.geofabrik.de/europe/turkey.html`.

Özyürek, E. (2006). *Nostalgia for the Modern: State Secularism and Everyday Politics in Turkey*. Duke University Press, Durham, NC.

Panagopoulos, C. (2009). Street fight: The impact of a street sign campaign on voter turnout. *Electoral Studies*, 28(2):309–313.

Panebianco, A. (1988). *Political Parties: Organization and Power*. Cambridge University Press, Cambridge.

Poguntke, T., Scarrow, S. E., Webb, P. D., et al. (2016). Party rules, party resources and the politics of parliamentary democracies: How parties organize in the 21st century. *Party Politics*, 22(6):661–678.

Samuels, D. and Zucco, C. (2015). Crafting mass partisanship at the grass roots. *British Journal of Political Science*, 45(4):755–775.

Sanayi ve Teknoloji Bakanlığı (2022). İlçelerin sosyo-ekonomik gelişmişlik sıralaması araştırması (SEGE-2022). Kalkınma Ajansları Genel Müdürlüğü, Ankara.

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

Scarrow, S. E. (2015). *Beyond Party Members: Changing Approaches to Partisan Mobilization*. Oxford University Press, Oxford.

Selçuk, O. and Hekimci, D. (2020). The rise of the democracy–authoritarianism cleavage and opposition coordination in Turkey (2014–2019). *Democratization*, 27(8):1496–1514.

Shaw, D. R. (2006). *The Race to 270: The Electoral College and the Campaign Strategies of 2000 and 2004*. University of Chicago Press, Chicago.

Somer, M. (2019). Turkey: The slippery slope from reformist to revolutionary polarization and democratic breakdown. *The ANNALS of the American Academy of Political and Social Science*, 681(1):42–61.

Stevens, F. R., Gaughan, A. E., Linard, C., and Tatem, A. J. (2015). Disaggregating census data for population mapping using random forests with remotely-sensed and ancillary data. *PLoS ONE*, 10(2):e0107042.

Stokes, S. C., Dunning, T., Nazareno, M., and Brusco, V. (2013). *Brokers, Voters, and Clientelism: The Puzzle of Distributive Politics*. Cambridge University Press, Cambridge.

Szwarcberg, M. (2015). *Mobilizing Poor Voters: Machine Politics, Clientelism, and Social Networks in Argentina*. Cambridge University Press, Cambridge.

Tavits, M. (2013). *Post-Communist Democracies and Party Organization*. Cambridge University Press, Cambridge.

Torres, M. and Cantú, F. (2022). Learning to see: Convolutional neural networks for the analysis of social science data. *Political Analysis*, 30(1):113–131.

Türkiye Büyük Millet Meclisi (1983). Siyasi partiler kanunu (Law no. 2820). Resmî Gazete No. 18027, 24 April 1983, as amended.

Türkiye İstatistik Kurumu (2026). Adrese dayalı nüfus kayıt sistemi sonuçları, 2025. TÜİK data portal, Ankara.

Van Dyck, B. (2014). Why party organization still matters: The Workers' Party in north-eastern Brazil. *Latin American Politics and Society*, 56(2):1–26.

White, J. B. (2002). *Islamist Mobilization in Turkey: A Study in Vernacular Politics*. University of Washington Press, Seattle.

Williams, N. W., Casas, A., and Wilkerson, J. D. (2020). *Images as Data for Social Science Research: An Introduction to Convolutional Neural Nets for Image Classification*. Cambridge University Press, Cambridge.

Wuthrich, F. M. and Ingleby, M. (2020). The pushback against populism: Running on "radical love" in Turkey. *Journal of Democracy*, 31(2):24–40.

Young, A. (2019). Channeling Fisher: Randomization tests and the statistical insignificance of seemingly significant experimental results. *Quarterly Journal of Economics*, 134(2):557–598.

Yüksek Seçim Kurulu (2024). Seçim sonuçları, 2014–2024. Supreme Election Council, Ankara.

Online Appendix

Flags Follow Votes: Where Turkish Parties Open Offices and How They Mark the Street

A Data Construction

A.1 Search results and classified places

The search export has one row for each place a query returns. When several rows share the same coordinates, I combine them into one record and keep all the names returned for that location. Before matching names, I convert them to lowercase and fold Turkish characters. I assign a location to a party if one of its names contains the party's full name or an unambiguous abbreviation in an organizational context. The classification distinguishes twenty-four parties or lineages and groups the rest under "other parties." I count the BDP, HDP, DBP, the Green Left Party, and the DEM Party as one lineage because offices have passed from one party to the next within the Kurdish political movement.

I identify the organizational level from the wording of the listing. For example, *il başkanlığı* denotes a provincial office, *ilçe başkanlığı* a district office, and *belde* a town office. The other terms include *genel merkez* (national headquarters), *kadın/gençlik kolları* (auxiliary branches), and *seçim bürosu/koordinasyon merkezi/iletişim merkezi* (campaign offices).

I record affiliated organizations, such as youth foundations, separately. For the remaining locations, I check the names against a list of state and municipal bodies. Matches are coded as public institutions and the rest as "other." If a location carries both a party name and the name of a public institution, as can happen when they share a building, I count it as a party organization. The replication materials include an audit file with a random sample from each class.

Table A1 gives the number of listings by party, and Table A2 gives the counts of public institutions by type. Figure A1 shows how each party's listings break down by organizational level. I check district-level presence against a second set of listings for the same parties, collected through a browser (Table A7). That collection records the coordinates of the map view, so I use it only at the district level.

A.2 Districts

I use the 2025 second-level administrative boundaries to assign each listed place and Street View panorama to a district. I link the boundary file to the election returns, population counts, and development index by province and district name, folding Turkish characters

Table A1: Listed party organizations by party

Party	Listings	Party	Listings
AKP	1,196	DSP	158
CHP	962	Vatan	143
MHP	711	Gelecek	114
Saadet	439	TİP	104
İYİ	431	HÜDA PAR	68
YRP	238	TKP	64
Other parties	234	DP	59
DEVA	209	BTP	36
Zafer	192	EMEP	29
HDP/DEM line	186	Millet	18
Memleket	161	SOL	13
BBP	159	TKH	4

Table A2: Public institutions returned by the searches

Type	Places
Other public bodies	1,730
Education	1,199
Police and gendarmerie	943
Agriculture and forestry	543
Courts and election boards	454
Land, title-deed and tax offices	427
Municipality	424
Religious affairs	283
Governorship	228
Health	132

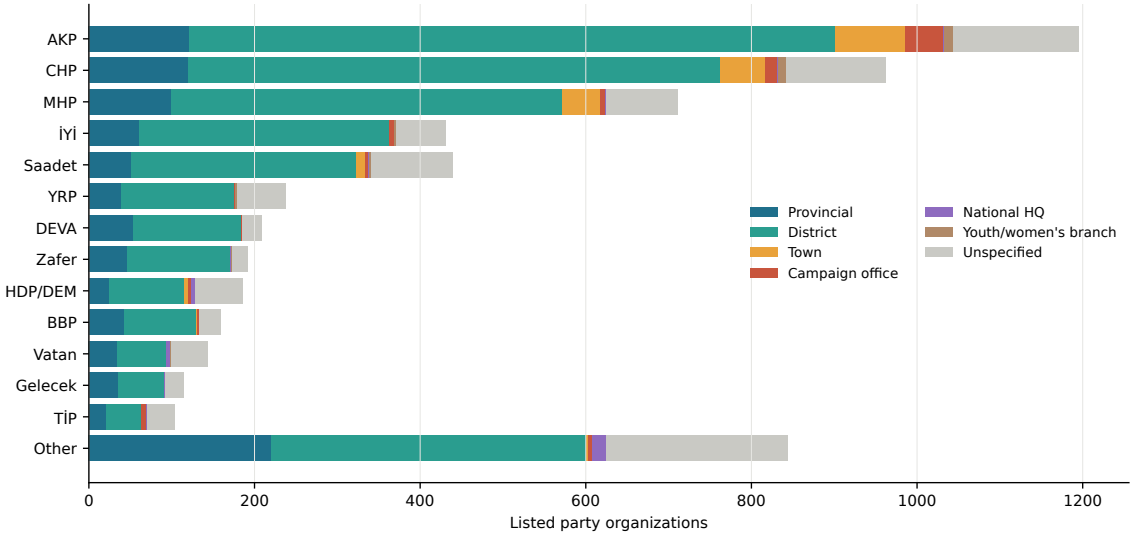

Figure A1: Listed party organizations by party and organizational level.

before matching. After correcting one spelling variant, I match all 973 districts across the four sources. Figure A2 shows how many party lineages are present in each district and how common party organizations are relative to the size of the electorate.

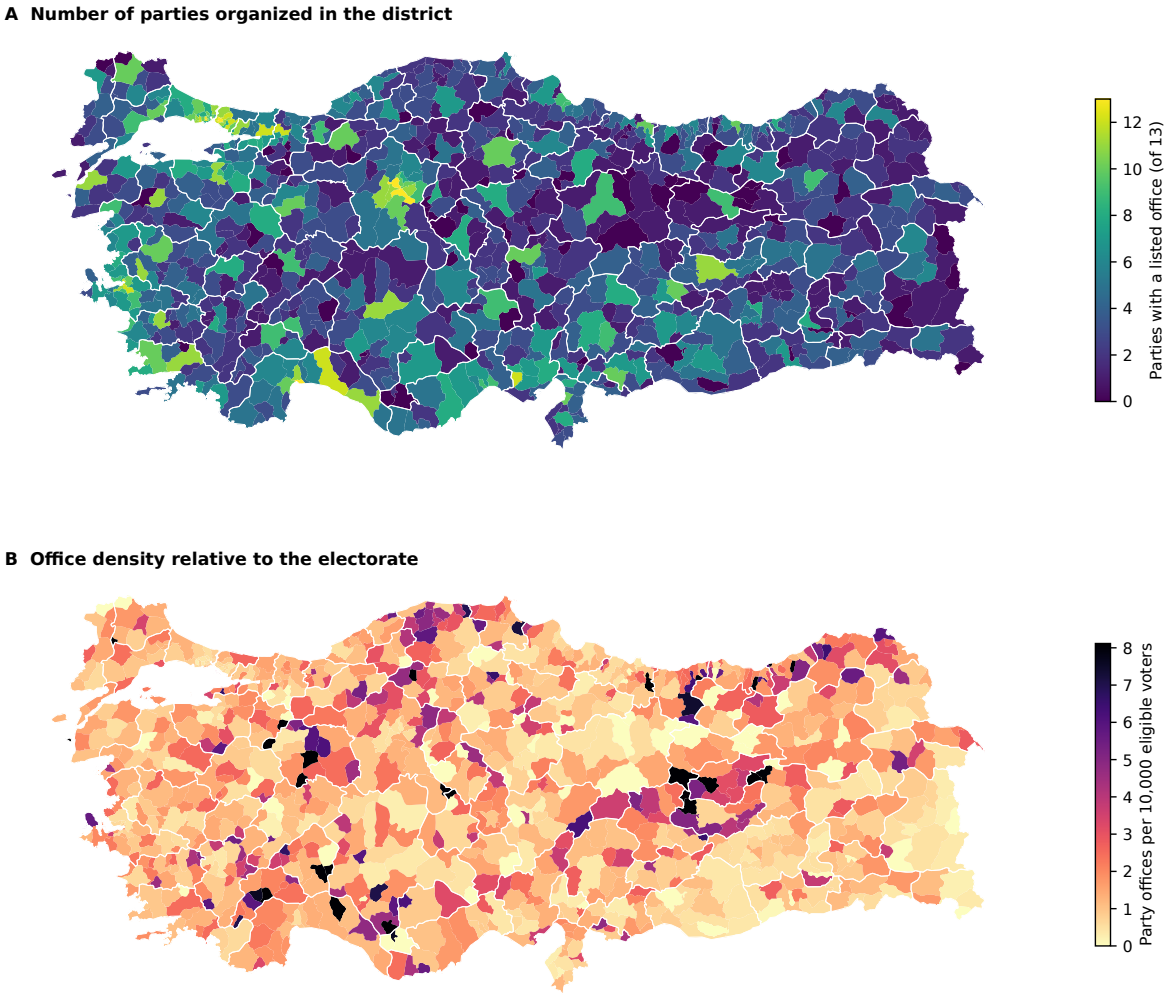

Figure A2: Party organization by district. Panel A shows how many of the thirteen party lineages have at least one listed organization in each district. Panel B shows the top-coded number of listed party organizations per 10,000 eligible voters, using the 2023 electorate as the denominator.

A.3 Street View sampling and coverage

For each listed coordinate, the sampling protocol queried the Street View metadata service at the center and at ten meters along each of thirteen bearings. It queried the center once per bearing, for a total of 26 queries per coordinate and 379,158 overall. The queries returned metadata for roughly 283,000 distinct panoramas. I retained panoramas captured in an election month or one of the two preceding months. The resulting sample contains

6,609 panoramas, of which 6,496 appear in the annotation export. Figure A3 shows the coverage of the labeled imagery. A handful of panoramas captured in early 2019 fall within the window of that year's local elections, but there are too few to include in the analysis.

Capture dates are available by month. Party symbols become more common as election day approaches, with the sharpest increase before local elections. Differences in display between panoramas near a party's own office and other panoramas are already visible two months before the vote (Figure A4).

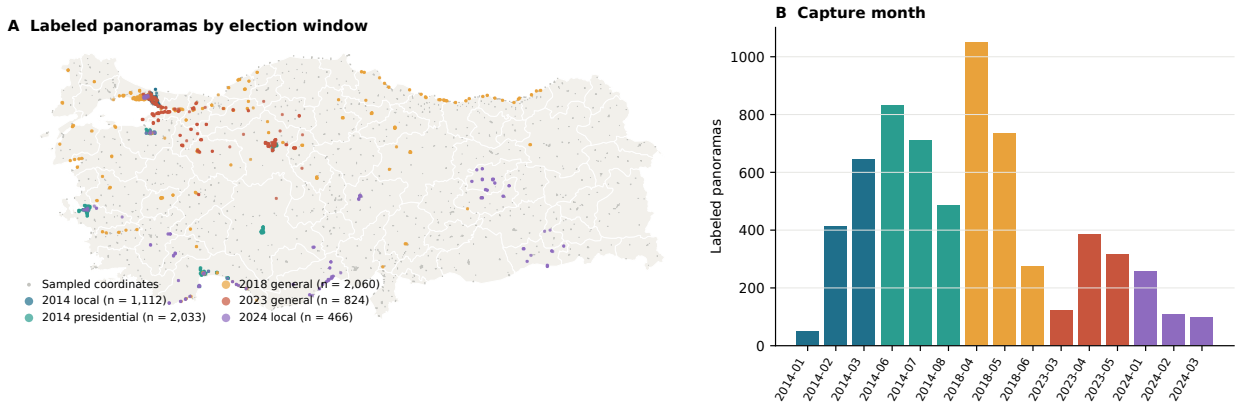

Figure A3: Coverage of election-window imagery. Panel A maps labeled panoramas by election window, with all sampled coordinates in grey. Panel B shows the number of labeled panoramas by capture month.

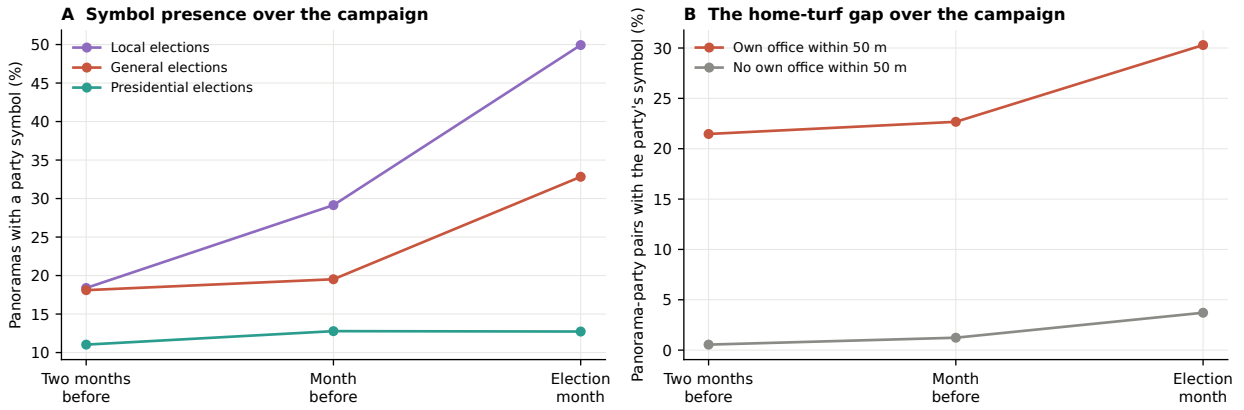

Figure A4: Party symbols as election day approaches. Panel A shows the share of labeled panoramas with at least one party symbol, by months until polling day and type of election. Panel B shows the share of panorama-party pairs in which the party's symbol is visible, grouped by whether the party has a listed office within 50 meters.

A.4 Labels

Coders annotated each panorama in eight tiles. The panorama identifier in the file name links each tile to its capture metadata. One labeled panorama has no matching record. To avoid counting the same symbol twice, I merge boxes of the same class within a tile if their intersection over union is at least 0.5 or if both boxes are large and one lies mostly within the other. Table A3 gives the counts by annotated class, Figure A5 shows their composition by election window, and Figure A6 gives further examples of annotated panoramas.

Table A3: Labeled symbols by annotated class

Class	Symbols	Class	Symbols
turkish flag	4,163	millet partisi	17
chp	3,130	HUDA PAR	16
akp	3,095	political symbols	13
saadet	2,259	Alperen Ocaklari	12
mhp	1,860	turkiye degisim partisi	10
iyi	736	hak ve esitlik partisi	10
bbp	404	anap	9
hdp	404	tkh	5
isci partisi	281	ozgurluk ve dayanisma partisi	5
vatan	199	dbp	5
yrp	176	tdp	5
ataturk	119	tip	5
demokrat parti	112	gelecek partisi	4
dsp	100	sdp	4
btp	93	ldp	4
memleket partisi	79	bdp	3
deva	70	scp	3
ulku ocaklari	42	hkp	2
yesil sol parti	38	hak par	1
tkp	34	ksp	1
hyp	30	hur dava partisi	1
zafer	29	sykp	1
grey wolves	24	sol parti	1
Emek Partisi	17		

A.5 Elections

The eight elections cover different sets of party lineages. Municipal council returns (2014, 2019, 2024) cover up to thirteen lineages. For 2024, I aggregate town-level council returns to the district. The parliamentary returns include the lineages that ran their own lists in the two elections of 2015 and in those of 2018 and 2023. In the August 2014 presidential returns, I attribute votes for the AKP and HDP candidates to their respective lineages. I assign votes for the joint CHP–MHP candidate to both parties, giving them the same vote

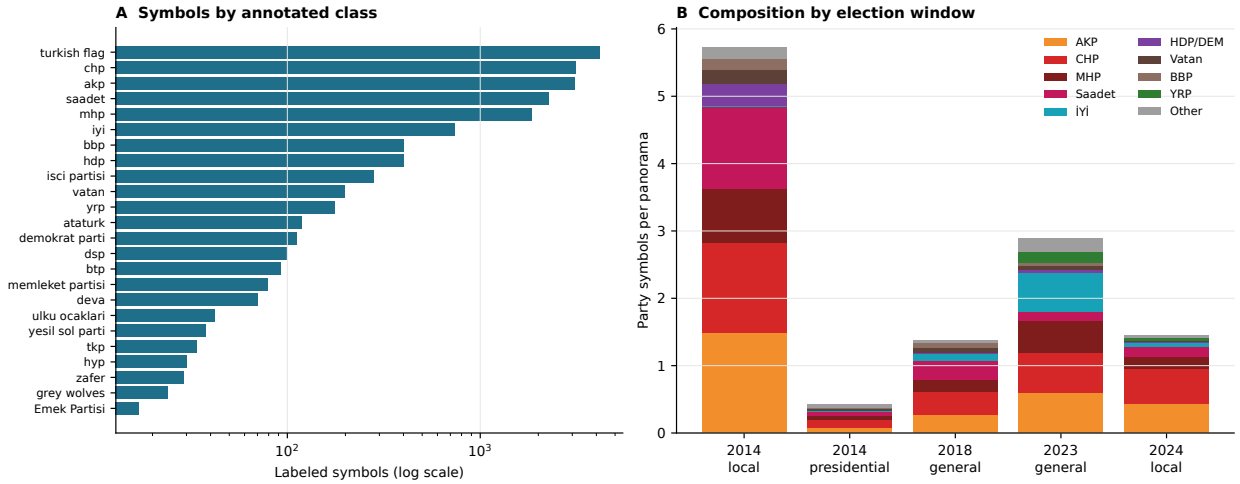

Figure A5: Labeled symbols. Panel A shows counts on a log scale for classes with at least 15 symbols. Panel B shows party symbols per labeled panorama by election window and party lineage.

share in that election. Table A9 reports estimates that exclude the presidential window. Vote shares use valid votes as the denominator. I take mayoral winners and margins from district mayoral returns in 2014, 2019 and 2024, using district races in metropolitan provinces as well.

A.6 Population and amenities

To measure the population within a given radius, I sum the population of the grid cells whose centers lie within it. The full grid contains 80.6 million people. For each office, I draw both sets of controls within its district. For the 20 resident-weighted controls, I sample cells in proportion to population and then sample locations uniformly within each cell. For the 20 street controls, I sample locations uniformly along the length of the OpenStreetMap road network, from motorways to residential streets.

Commercial amenities include restaurants, cafés, bars, fast food outlets, banks, cash machines, exchange offices, pharmacies and marketplaces. The retail category includes all shop tags. The transit category includes bus stops and stations, rail, tram and metro stops, ferry terminals, taxi ranks and parking. Civic amenities include schools, kindergartens, universities, hospitals, clinics and doctors' practices, post offices, libraries, police and fire stations, courthouses, town halls and other government offices. Places of worship form a separate category, and community amenities include community and arts centers, social facilities, theaters and cinemas.

I count roads tagged tertiary or above as main roads. To measure distance to the seat of

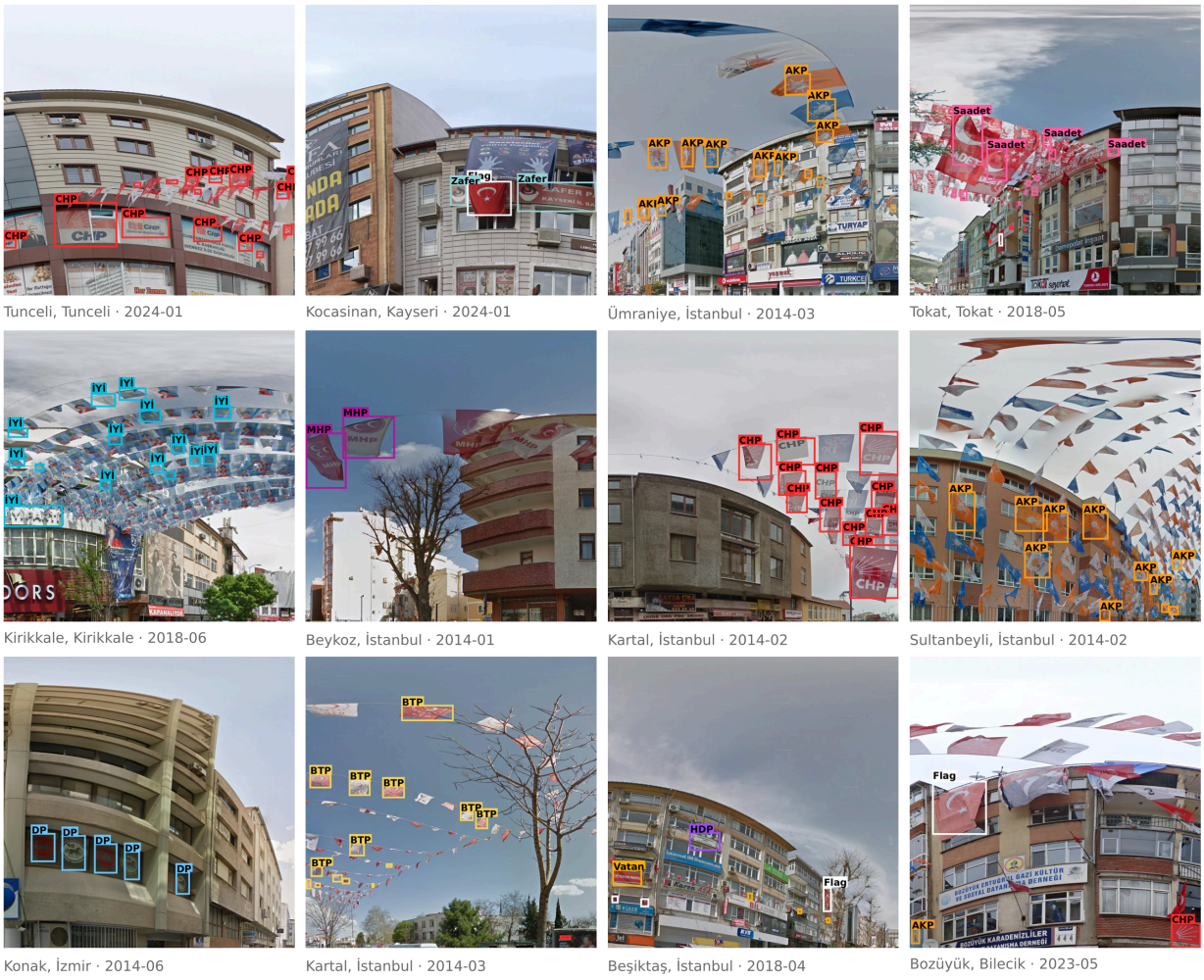

Figure A6: Further examples of annotated party symbols around listed offices.

government, I use the nearest governorship or municipality building in the directory or town hall in OpenStreetMap. Table A4 compares party offices, public institutions and the two sets of control locations.

Table A4: Surroundings of party offices, public institutions and control locations

	Party offices	Public institutions	Where residents live	Street locations
Residents within 500 m (median)	5,079	2,773	2,660	208
Distance to population-weighted center, m (median)	2,489	2,322	3,206	6,243
Commercial amenities within 250 m (mean)	12.4	4.0	1.9	1.4
Shops within 250 m (mean)	14.5	3.0	2.4	1.9
Transit amenities within 250 m (mean)	4.0	1.2	1.4	1.1
Civic institutions within 250 m (mean)	2.4	1.8	0.7	0.4
Places of worship within 250 m (mean)	1.3	0.9	0.4	0.3
Distance to main road, m (median)	20	28	94	47
Distance to seat of government, m (median)	607	448	2,814	6,121
Party office within 250 m (share)	0.72	0.45	0.07	0.03
Locations	5,928	6,363	118,560	118,560

Note. For party offices the last share counts offices of other parties; for the remaining columns it counts any party office.

B Siting: Additional Results

Table A5 reports how the siting estimates change with the amenity buffer, classification rule, number of controls and sample. In Table A6, I repeat the main analysis using the January 2014 and January 2018 OpenStreetMap extracts, which contain far fewer mapped amenities than the current extract. Figure A7 compares amenities around each party's offices with those near resident-weighted controls. Figure A8 reports the siting coefficients for each party separately.

C Reach: Additional Results

Table A7 reports the alternative specifications for organizational presence. Figure A9 plots the regression discontinuity at the threshold for winning the 2019 district mayoral race. The sample includes the AKP, CHP and MHP in districts where each party finished first or second in the 2019 race.

Table A5: Robustness of the siting estimates

Specification	Estimate	SE	p	N
Baseline, resident controls: residents within 500 m	-0.159*	0.085	0.062	124,488
commercial amenities, 100 m buffer	0.397***	0.021	<0.001	124,488
commercial amenities, 250 m buffer	0.625***	0.035	<0.001	124,488
commercial amenities, 500 m buffer	0.779***	0.062	<0.001	124,488
strict classification: population	-0.133	0.087	0.129	118,713
five controls per office: population	-0.183**	0.082	0.026	35,568
excluding Istanbul: population	-0.152*	0.087	0.081	108,822
metropolitan provinces: population	-0.217**	0.095	0.023	88,242
other provinces: population	-0.021	0.161	0.894	36,246
district and provincial offices only: population	-0.065	0.125	0.605	95,403
rival office within 250 m	1.984***	0.068	<0.001	124,488
rival office, strict classification	1.999***	0.070	<0.001	118,713
rival office, excluding Istanbul	1.988***	0.076	<0.001	108,822
Baseline, street controls: residents within 500 m	2.407***	0.172	<0.001	124,488
commercial amenities, 100 m buffer	0.350***	0.024	<0.001	124,488
commercial amenities, 250 m buffer	0.526***	0.037	<0.001	124,488
commercial amenities, 500 m buffer	0.665***	0.062	<0.001	124,488
strict classification: population	2.442***	0.174	<0.001	118,713
five controls per office: population	2.232***	0.185	<0.001	35,568
excluding Istanbul: population	2.310***	0.172	<0.001	108,822
metropolitan provinces: population	2.297***	0.207	<0.001	88,242
other provinces: population	2.149***	0.269	<0.001	36,246
district and provincial offices only: population	2.511***	0.247	<0.001	95,403
rival office within 250 m	1.996***	0.070	<0.001	124,488
rival office, strict classification	2.010***	0.071	<0.001	118,713
rival office, excluding Istanbul	2.022***	0.081	<0.001	108,822

Note. Conditional logit coefficients from the specification in column 3 of Table 2 under alternative buffers, samples and control frames. Standard errors clustered by district. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

Table A6: Siting estimates by OpenStreetMap vintage

	January 2014	January 2018	November 2026
Residents within 500 m (log)	0.275***	0.186**	-0.159*
	(0.106)	(0.093)	(0.085)
Commercial amenities, 250 m	0.086***	0.274***	0.625***
	(0.022)	(0.030)	(0.035)
Shops, 250 m	-0.023	0.053*	0.048
	(0.023)	(0.030)	(0.034)
Transit, 250 m	0.100***	0.086***	0.099***
	(0.019)	(0.024)	(0.035)
Civic institutions, 250 m	0.032	0.031	0.077***
	(0.023)	(0.021)	(0.025)
Places of worship, 250 m	0.155***	0.263***	0.264***
	(0.015)	(0.021)	(0.024)
Distance to main road (log)	-0.990***	-1.027***	-1.005***
	(0.038)	(0.033)	(0.036)
Distance to seat of government (log)	-0.679***	-0.593***	-0.480***
	(0.064)	(0.050)	(0.045)
Party office within 250 m	2.975***	2.504***	1.984***
	(0.073)	(0.068)	(0.068)
Mapped points of interest	27,252	120,046	404,982
Observations	124,488	124,488	124,488

Note. Specification of column 3 in Table 2, resident-weighted controls, with amenities, roads and town halls taken from the OpenStreetMap extract of the date shown. Street-based quantities and control draws are recomputed for each extract. Standard errors clustered by district. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

Table A7: Robustness of the organizational-reach estimates

Specification	Estimate	SE	p	N
Baseline (Table 3, column 1): vote share	0.316***	0.043	<0.001	12,649
Including listings from the second scrape	0.320***	0.042	<0.001	12,649
Strict classification	0.319***	0.043	<0.001	12,649
Vote share at the 2023 general election (5 parties)	0.568***	0.060	<0.001	4,865
Vote share at the 2018 general election (6 parties)	0.575***	0.055	<0.001	5,838
Excluding Istanbul	0.332***	0.043	<0.001	12,142
Clustering by province	0.316***	0.052	<0.001	12,649
Mayoralty won in 2019	0.008	0.019	0.676	12,649
Mayoralty won in 2024	-0.030	0.020	0.139	12,649
Margin, Poisson count model	-0.202	0.137	0.141	12,649
Swing district, Poisson count model	0.080	0.060	0.184	12,649

Note. Linear probability models with district and party effects unless noted. Standard errors clustered by district except where stated. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

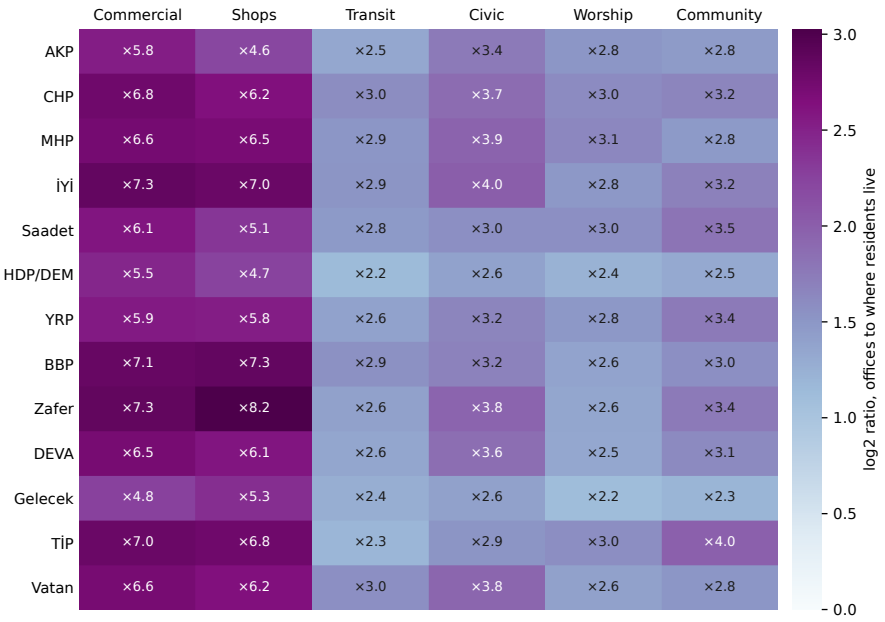

Figure A7: Amenities around party offices and resident-weighted controls. Each cell gives the ratio of the mean amenity count within 250 meters of a party's offices to the corresponding mean at resident-weighted control locations in the same districts.

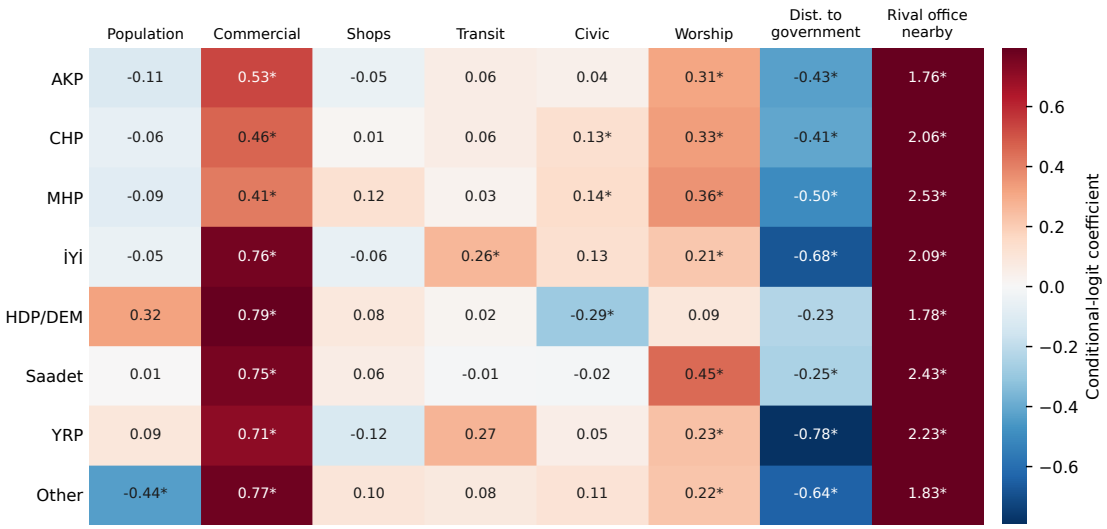

Figure A8: Siting coefficients by party. For each party, the conditional logit model in column 3 of Table 2 compares office locations with resident-weighted controls. The final column uses a separate scale and uniform shading. Asterisks mark $p < 0.05$.

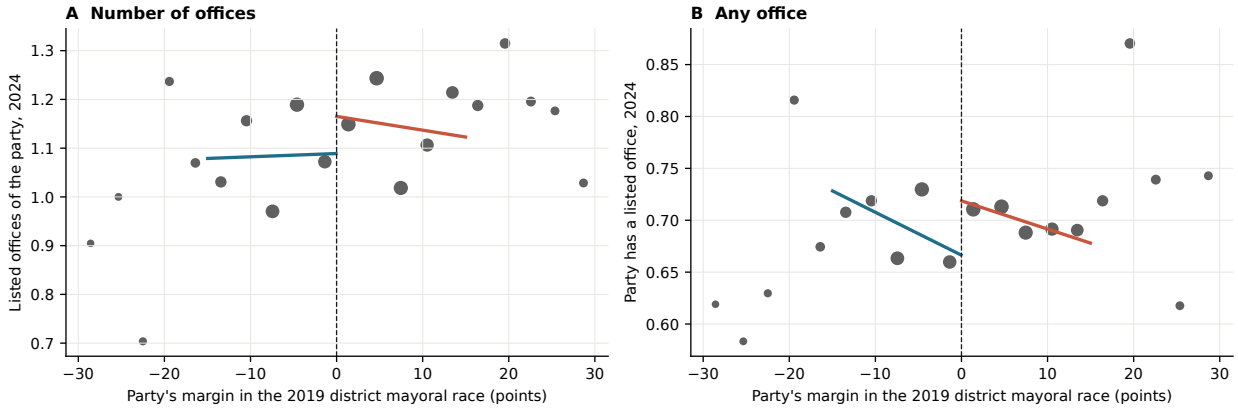

Figure A9: Winning the district mayoralty and organizational presence. The panels plot binned means of the office count (A) and the indicator for a listed office (B), both measured in 2024, against the party's margin in the 2019 district mayoral race. Lines show local linear fits on each side of the threshold.

D Street Presence: Additional Results

Table A8 reports alternative specifications for the home-turf premium. Figure A10 shows how the own-office coefficient varies when I shuffle party labels among offices within districts. It also shows how the own-office and symbol-share coefficients vary when I leave out each province in turn. Figure A11 shows how often the national flag and Atatürk imagery appear near each party's offices.

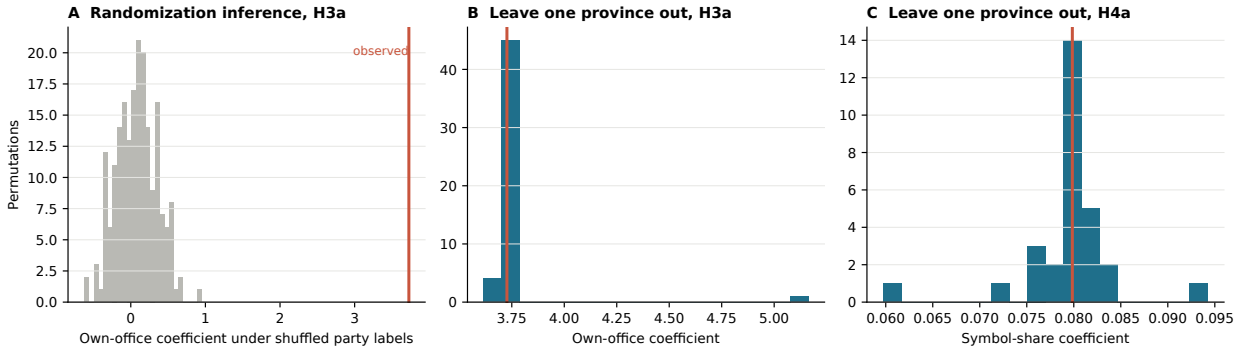

Figure A10: Stability of the main estimates. Panel A shows the distribution of the own-office coefficient across 200 permutations of party labels among offices within districts. The vertical line marks the observed estimate. Panels B and C show estimates of the own-office coefficient (H3a) and the symbol-share coefficient (H4a) that leave out one province at a time.

Table A8: Robustness of the home-turf estimates

Specification	Estimate	SE	p	N
Baseline (Table 4, column 2)	3.727***	0.330	<0.001	6,004
Radius 30 m	4.041***	0.344	<0.001	6,004
Radius 100 m	3.435***	0.308	<0.001	6,004
Strict classification	3.714***	0.329	<0.001	6,004
2023 and 2024 windows only	5.365***	0.586	<0.001	1,408
2014 and 2018 windows only	3.495***	0.337	<0.001	4,596
Excluding Istanbul	5.163***	0.398	<0.001	2,703
Dropping the top 1% of panoramas	3.615***	0.353	<0.001	5,637
Clustering by district	3.727***	0.372	<0.001	6,004
2014 local window	3.096***	0.360	<0.001	2,564
2014 presidential window	5.443***	0.948	<0.001	752
2018 general window	5.381***	0.592	<0.001	1,280
2023 general window	5.457***	0.625	<0.001	1,137
2024 local window	4.276***	1.367	0.002	271
Benchmark: party symbols near party office vs. public institution	1.474***	0.275	<0.001	5,944
Benchmark: national flags, same comparison	0.345	0.250	0.169	6,103
Linear probability: own office × vote share	-0.131	0.082	0.111	35,886
Linear probability: own office × holds mayoralty	0.099***	0.038	0.009	35,886
Linear probability: own office × governing party	-0.081***	0.030	0.008	35,886
Poisson: own office × local-election window	-3.155***	0.655	<0.001	4,263

Note. Poisson coefficients on the indicator for an own-party office within the stated radius, with panorama and party-by-district-by-election effects. The benchmark rows compare panoramas by type of nearest sampled place with district-by-election effects and a control for residents within 500 meters. The final block reports interactions from the models for H3b. Standard errors clustered by sampled coordinate except where stated. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

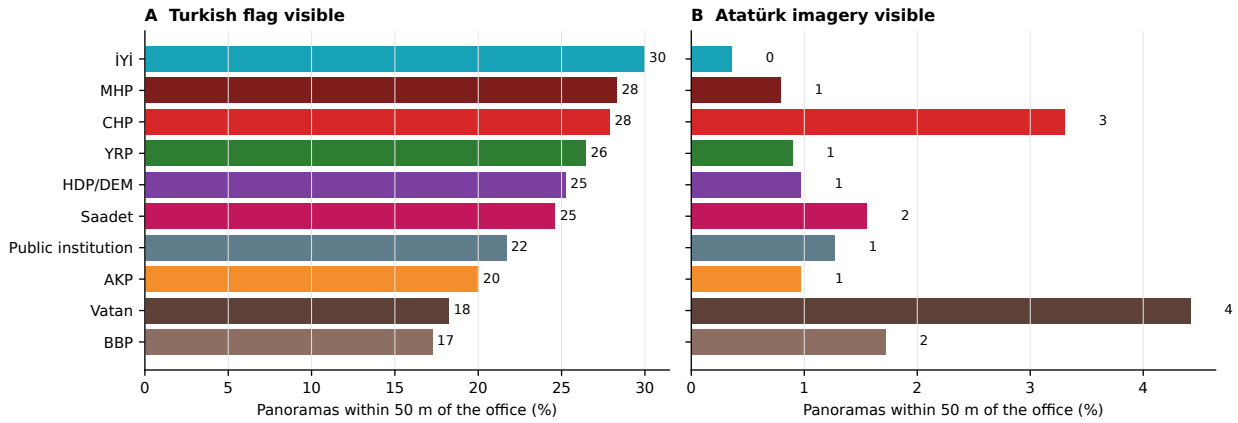

Figure A11: National symbols around party offices. Panel A shows the share of panoramas with a Turkish flag. Panel B shows the corresponding share with an image of Atatürk. Each panel reports shares among labeled panoramas within 50 meters of an office of each party and among panoramas nearest to a public institution.

E Symbols and Votes: Additional Results

Table A9 reports alternative specifications for the relationship between symbol shares and vote shares. Figure A12 compares estimates that use votes from the election matched to the imagery window with estimates that use votes from other elections.

Table A9: Robustness of the symbol-vote estimates

Specification	Estimate	SE	p	N
Baseline (Table 5, column 2)	0.080***	0.023	<0.001	771
Unweighted	0.059***	0.021	0.006	771
At least 5 panoramas	0.082***	0.022	<0.001	947
At least 20 panoramas	0.087***	0.027	0.002	503
At least 30 panoramas	0.089***	0.030	0.004	359
Excluding Istanbul	0.094***	0.029	0.002	556
Excluding Istanbul, Ankara and İzmir	0.077**	0.038	0.044	480
2023 and 2024 windows only	0.077**	0.036	0.038	323
Excluding the 2014 presidential window	0.041**	0.017	0.018	655
Clustering by province	0.080***	0.022	0.001	771
Controlling for share of panoramas at own office	0.080***	0.024	0.001	771
Symbols away from party offices only	-0.054	0.039	0.177	267
Share of panoramas showing the party	0.354***	0.072	<0.001	771
Fractional logit (coefficient on the logit scale)	0.431***	0.119	<0.001	771
2014 local	0.089*	0.046	0.073	80
2014 presidential	0.136***	0.047	0.008	116
2018 general	0.012	0.018	0.510	252
2023 general	0.025	0.019	0.200	115
2024 local	0.138*	0.070	0.068	208
AKP	0.116***	0.038	0.003	126
CHP	0.109***	0.038	0.005	126
MHP	0.045	0.058	0.440	126
HDP/DEM	0.208	0.134	0.122	126

Note. Coefficients on the party's share of observed symbols; the outcome is the party's vote share. Party-by-election and district-by-election effects in the pooled rows; election-specific rows include party effects and party-specific rows include election effects. Weighted by panoramas; standard errors clustered by district except where stated. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

F Departures from the Original Design

I documented the hypotheses, estimation strategy and robustness checks before estimating any models. The design was unregistered. The analysis departs from it in four ways.

First, I planned to test H2a using vote shares from elections before the directory snap-

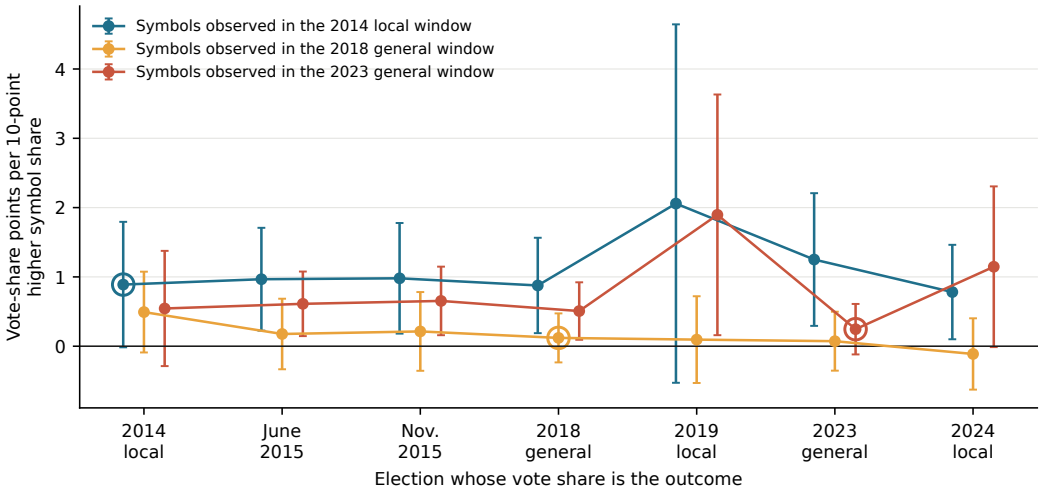

Figure A12: Symbol shares and vote shares across elections. Points show coefficients on the party's symbol share in the imagery window named in the legend. The outcome is the party's vote share in the election on the horizontal axis. The regressions include party and district effects. Circles mark elections that match the imagery window. Bars show 95 percent confidence intervals.

shot. The parliamentary returns identify only five or six of the thirteen lineages, so the primary test uses the March 2024 municipal council returns, which cover all thirteen. The estimates using 2018 and 2023 parliamentary vote shares are larger (Table A7).

Second, I planned to use district-by-party effects in the models of symbols and votes for districts observed in more than one window. Only 104 party-district observations meet that condition, and the estimate reported in the text is uninformative. Third, I test H1a using the specification without amenity controls because the hypothesis is unconditional. Fourth, I cluster standard errors for the preferred H3a model by sampled coordinate because panoramas around a coordinate share an office. Table A8 reports the district-clustered standard errors.