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ORIGINAL PAPER

Sailing through history: the legacy of medieval sea trade on migrant perception and extreme right voting

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Abstract

This study evaluates whether exposure of local areas to medieval Mediterranean trade with Africa and the Middle East still shapes Italian political attitudes. Such exchanges may have fostered cultural traits that eased interaction with people of different cultures, ethnicities, and religions. We show that individuals living near a medieval port are less likely to view migrants as a security threat or to report right-wing voting preferences; these areas also had fewer xenophobic attacks during the 2015 Syrian refugee surge. We also find that right-wing parties received fewer votes near medieval ports only when immigration was highly salient. Finally, we document a lower probability of Jewish deportations near medieval ports during the Nazi occupation, the only period when a minority group was explicitly targeted. This suggests that deep-rooted cultural traits can re-emerge when historical and political conditions make them relevant.

Keywords Political preferences · Immigration · Cultural persistence · Trade networks · Persistence studies

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1 Introduction

The rise of right-wing populist parties across Western democracies over the past decade has spurred the interest of many social scientists (Guriev and Papaioannou 2022). Although these parties lack a fully coherent shared ideology, their platforms consistently feature strong anti-migrant stances, anti-elitist narratives, and skepticism toward globalization. In Europe, rising migration rates and the refugee inflows associated with the Syrian crisis have made migration a prime candidate to explain the growing support for these movements (Harmon 2018; Dustmann et al. 2019; Steinmayr 2020, among others). A parallel literature links the success of the populist right to a broader "cultural backlash" (Norris and Inglehart 2019) and the increasing salience of cultural over economic cleavages—even amid rising inequality—such as the division between universalists and particularists (Enke 2023), as documented by Bonomi et al. (2021) and Gennaioli and Tabellini (2023).

If cultural cleavages—and especially universalist morality—shape political behavior, understanding their historical roots becomes essential. This paper brings new evidence on the long-run foundations of cultural attitudes toward migrants by exploiting differential exposure of local Italian areas to medieval sea trade between Italian seaports and Muslim North Africa and the Middle East. Using various data sources, we test whether early, repeated cross-cultural contact forged more universalist norms that persisted over time and that attenuate contemporary anti-migrant sentiment.

Italy offers a compelling setting. First, immigration is relatively recent: it was negligible in the 1980s and it accelerated only from the late 1990s onward. Second, Italy's geographic position made it a principal entry point for roughly 0.6 million refugees during 2014–2017, mainly from Syria, but also from the Maghreb and sub-Saharan Africa, arriving via Libya (Figure D5, Appendix D.3). During this period, migration became central to political discourse, as illustrated by Google Trends for "refugees," "migration," and "migration smuggling" (Appendix D.3). Right-wing parties indeed capitalized on these saliencies: *Lega* and *Fratelli d'Italia* rose from 6% of the vote in 2013 to 21% in 2018. Third, Italy exhibits one of the largest gaps in the EU between perceived and actual migrant shares as well as one of the largest levels of anti-Muslim prejudice.[1]

Historically, the medieval Mediterranean was a dense web of commercial and cultural exchange (Abulafia 2011; Braudel 1995). Italian port cities hosted large communities of sailors, who usually met Muslims in the main Islamic ports; moreover, they maintained "fondaci" in various Islamic urban centers. As a result, Italian merchants and sailors interacted regularly with Muslim traders, and Muslims often traveled on Italian ships (Abulafia 2011). Port communities also included sizable

[1] See Appendix B for a more in-depth description of contemporary attitudes toward (Islamic) migrants in Italy.

enslaved populations—reaching up to 10% in some cities—with a non-negligible Muslim share (Calafat and Santus 2011). Moreover, mosques or informal prayer spaces existed in some ancient Italian ports, especially in the Early Modern period, as discussed in Appendix A. These repeated interactions made ports focal points for encounters among people of different religions, ethnicities, and cultures from the late Middle Ages into the Early Modern era (Tagliaferri 2018; Piccinno and Zanini 2019)[2]

Building on Allport et al.'s (1954) contact theory, we hypothesize that proximity to medieval ports increased historical intergroup contact—across religion, culture, and skin color—at a time when most communities were still highly insular.[3] A complementary mechanism draws on Jha (2013, 2014, 2018), who argues that a more universalist morality might have evolved out of the norms and informal institutions that governed the sea-trade relations between the Italian port cities and the Muslim traders, whose activity was complementary with that of Italian merchants, non-replicable (before Portuguese and Spanish circumnavigation of Africa in the sixteenth century) and non-expropriable (for military reasons). These are indeed the conditions under which peaceful intergroup cooperation is most likely to emerge, as suggested by Jha (2013). Although we cannot completely rule out alternative mechanisms, we have explicitly addressed one potential channel—namely, the role of trade in shaping long-term orientation—and the results remain robust, thus consistent with a cultural interpretation of our findings.

Accordingly, cross-cultural trade between medieval Italian ports and the southern Mediterranean may have fostered cultural traits—such as tolerance, reciprocal understanding, and shared norms—that facilitated cooperation with out-groups (Kaiser and Calafat 2014; Trivellato 2009; Trivellato et al. 2014). As a justification for the survival of these more universalist values and their transmission across generations, we borrow the intuitions developed in Tabellini (2008), arguing that where legal enforcement is relatively effective across distances and social and cultural boundaries, cooperative values are rewarded and thus transmitted intergenerationally ("well-functioning legal institutions breed good values"). In many medieval ports, courts applied equal treatment regardless of religion—for instance, in Genoa (Moore 2001). Because port activity remained economically pivotal well into the preindustrial era (Bosker et al. 2008), a more tolerant attitude toward individuals with a different culture may have been for centuries an advantage for people living in proximity to these ports, which might explain its persistence over time.

Empirically, we first analyze individual-level survey data, regressing indicators of right-wing political positioning and migration-related beliefs on a dummy

[2] We refer to Appendix A for a comprehensive account of the historical background.

[3] Tazzara (2017), moving from the example of the free port of Livorno in the early Modern Era, even argues that the seeds of Liberalism emerged from the interplay between free trade, politics and identity in the early modern Mediterranean. Turning to the modern period, Lonsky (2021) provides evidence in support of the intergroup contact theory in the context of contemporary immigration, showing that increased contact between natives and immigrants can mitigate natives' anti-immigrant attitudes. In particular, the study finds that a higher share of immigrants at the municipal level is associated with a reduction in vote shares for the far-right Finns Party in Finland.

for residence in municipalities close to medieval ports. We control for region or province fixed effects and a rich set of individual, geographic, historical, and contemporary municipal controls. Key historical controls capture medieval economic development, distance to the nearest medieval marketplace, and distance to Tunis—the principal base for fifteenth–sixteenth century Muslim corsairs (Accetturo et al. 2024)—which may proxy historical exposure conducive to hostility. We further control for geographic features associated with trust formation, such as ruggedness. To defend the exogeneity of individuals' distance from medieval ports, we compute distances along the ancient Roman road network (117 A.D.) rather than modern transport networks, mitigating concerns that contemporary infrastructure and market access drive our results. Indeed, Roman roads were strongly predetermined and primarily military in origin (Dalgaard et al. 2022; Garcia- López et al. 2015).[4]

Our main findings are fourfold. First, individuals living nearer to medieval ports are less likely to self-report extreme right-wing views, intend to vote for right-wing parties or the right coalition (Barone et al. 2016), and perceive migrants as a threat; moreover, they also express more favorable views of religious pluralism. Second, respondents close to medieval ports display greater long-term orientation, suggesting that medieval long-distance trade may have shaped the local economic environment by fostering a more forward-thinking mentality. While this mediates part of the relationship with political preferences and migration beliefs, we still find that a substantial direct effect of living close to a medieval port still remains, which we interpret as the effect via a more universalist type of morality. Third, placebo exercises show that proximity to Italy's largest contemporary ports does not predict attitudes or voting. When both medieval and modern port distances are included in the regression jointly, the coefficient for the medieval ports variable remains significant. This in turn suggests that when we identify the impact of medieval ports using only those that are no longer important ones, the effect is still visible. Similarly, medieval ports without historical African trade connections show no analogous effects, indicating that it is cross-cultural—rather than merely maritime—trade that matters. Fourth, municipal-level data for 2013–2018 reveal fewer xenophobic attacks near medieval ports. In the 2018 election—when migration salience peaked—municipalities close to medieval ports experienced about a three-percentage-point lower vote share for the right coalition, controlling for relevant covariates. No comparable penalties were observed in 1996, 2006, or 2013, when migration was less salient, and earlier elections even show relatively stronger right-wing performance near medieval ports. This temporal pattern suggests that tolerant dispositions persist latently and become behaviorally salient primarily when migration is politicized, rather than reflecting stable left–right alignments or general progressivism.

To further probe the mechanism, we consider a historical episode in which the Italian state targeted a minority. Following the 1938 Racial Laws, during the 1943–1945 occupation, the Nazis.—often assisted by fascist authorities—deported thousands of Jews. Municipalities closer to medieval ports exhibit a lower

[4] In the Middle Ages, the road network was still largely based on the ancient Roman one.

probability of Jewish arrests, consistent with a persistent, contextually reactivated tolerance toward out-groups.

All in all, our results are consistent with Cantoni et al. (2019), who document dormant local propensities toward the far right in Germany (proxied by historical Nazi support) that reemerged when a far-right political platform became available again.[5]

While we refer to Appendix B for a more comprehensive review of the related literature and a thorough discussion of the paper's main contributions, we note here that this study fits well into different strands of literature. First and foremost, our paper relates directly to the literature on historical persistence and, more specifically, to works that have investigated the deep roots of (in)tolerant behaviors toward minorities (Voigtländer and Voth (2012), Becker and Pascali (2019), among others). The main contribution of this study is to show that certain cultural traits can occasionally resurface when the right political circumstances occur, and that long-distance cross-cultural trade can foster more tolerant behavior toward migrants—not only by increasing long term orientation but also by favoring the emergence of a more universalist morality. Second, our paper also speaks to the literature on the determinants of the electoral success of populist right-wing parties, emphasizing the importance of deep-rooted cultural elements (Dustmann et al. (2019), Guriev and Papaioannou (2022), among others). Third, it connects to the literature on geographical persistence by showing that, even accounting for ruggedness, meteorological variability and earthquakes, differential exposure to long-distance trade can have persistent effects on current cultural attitudes (Nunn and Puga (2012), Buggle and Durante (2021), among others). Finally, our study contributes to the small economics literature on the determinants of the Holocaust (Becker et al. (2022).

The rest of the paper is organized as follows. Sections 2 and 3 present the data and the identification strategy, respectively. Empirical evidence from survey-level data is presented in Section 4, while municipality-level analysis is undertaken in Section 5. Section 6 concludes the paper. In addition, the Online Appendix (hereafter, the Appendix) provides additional material. In Appendix A, we build on history scholarship to provide a comprehensive discussion of why we believe that local areas close to Medieval ports are associated with greater tolerance toward migrants. Appendix B discusses the relevant literature and highlights the paper's main contributions. Appendix C, in turn, examines the current perception of migrants in Italy in greater depth. Appendix D eports additional information on data and maps, while Appendices E, F, and G present further robustness checks and analyses.

[5] By contrast with the reactivation of memories of the Turkish invasion in the sixteenth century by the Austrian far-right described in Ochsner and Roesel (2024), our setting lacks a modern political entrepreneur explicitly mobilizing pro-cosmopolitan memories: rather, an inherited universalist orientation appears to attenuate the effectiveness of anti-migrant appeals.

2 Data and descriptive statistics

This study uses the 2017 wave of the IPSOS "Osservatorio Giovani" for the Giuseppe Toniolo Institute, an Italian individual-level survey covering trust, perceptions of migrants, voting intentions, and standard demographics (education, gender, age, and marital status). In 2017, 3034 respondents aged 20–35 participated; restricting to our key questions yields 1859 observations.[6]

We select this dataset for its unique combination of perceptions of migrants, detailed political positioning, voting intentions, and municipality of residence—features unmatched in Italy. Alternative sources (e.g., ITANES) are less suitable for our sample period, as they lack sample weights, include vague migrant items, and have 10% missing municipalities.[7] We augment the IPSOS microdata with municipal geographic, socio-economic, and historical variables. We also compute each respondent's municipality distance to medieval ports trading with Africa using the ancient Roman road network. The following paragraphs provide a detailed description of the sources and variables used in this study.

2.1 Dependent variables

The "Osservatorio Giovani" survey is used to construct dummies for political positioning and vote intention. Our main outcome, *FarRightPositioning*, derives from the question "In politics, we often talk about "left" and "right." Considering your political beliefs, where would you place yourself?" on a 1–10 left–right scale; we drop "I don't place myself" and code 1–7 as 0, 8–10 as 1.[8]For center-right vote intention, we use likelihood-to-vote (1–10) and set $CentreRightVotingIntention = 1$ if the respondent scores ≥ 8 for at least one among *Lega*, *Fratelli d'Italia*, *Forza Italia*, and 0 otherwise. We also define *Anti-migrantsParty*, which accounts for *Lega*, *Fratelli d'Italia*, and *Forza Nuova*, the most extreme-right parties in Italy in 2017.[9]

For migrant perceptions, we use the statement "Immigrants make Italy an unsafe place. How much do you agree, in reference to this statement?" (1–4) and define $MigrantPerception = 1$ if the respondent answered "Very much agree," and 0 otherwise. We also construct $ReligiousPluralism = 1$ if the respondent "Very much agrees" that pluralism is normal today; $IntertemporalPreferences = 1$ if the present matters more than the future—a proxy for the short-term orientation of individuals—and $MigrantEconomicPerception = 1$ if "Very much agree" that migrants worsen Italy's economy.

For the municipality level analysis, we define *RightVotesShare* as the vote share for right-wing parties/coalitions to the Chamber of Deputies from the 1950s to

[6] Considering only individuals who answered the questions of interest.

[7] For more details on ITANES, see Barone et al. (2016).

[8] We also construct *FarRightPositioning2*, equal to 1 for answers 9–10 and 0 otherwise.

[9] Other parties covered: *Movimento 5 Stelle* (populist, non-aligned), *Partito Democratico* (center-left), *Sinistra Italiana*, *Articolo 1* (far left).

2018: *Movimento Sociale Italiano*, *MSI* (1958, 1968, 1976, 1987), *Polo per le Libertà* (1996), *Casa delle Libertà* (2006), and both center-right and extreme-right parties in 2013 and 2018, even if they ran separately.[10] Analogously, for the left-wing parties (elections in 1958, 1968, 1976, and 1987) we consider the votes obtained by the *Partito Comunista Italiano* (*PCI* Party) in 1958, 1968, 1976, and 1987; *L'Unione* and *Partito della Rifondazione Comunista* in 1996; *L'Unione* in 2006; *Italia. Bene Comune* in 2013; and in 2018 we account for votes obtained by the center-left coalition.[11]

We code *RacistEpisodesDummy* = 1 if at least one racist/xenophobic episode over the period 2013–2018 is recorded by Lunaria's "Cronache di ordinario razzismo," and 0 otherwise.[12] Finally, *JewishArrestsDummy* = 1 if at least one Jewish arrest occurred in 1943–1945, and 0 otherwise.[13]

2.2 Ports and routes in the medieval era

The locations of medieval ports with African routes rely on historical sources (Sheperd 1926; Lampman 2018; Musarra 2020), which document Mediterranean port–route configurations between the eleventh and fifteenth centuries. Figure 1 shows the port configuration used in our main analysis: Venice, Messina, Palermo, Reggio Calabria, Naples, Genoa, Gaeta, Livorno, Syracuse, Otranto, and Porto Torres are coded as trading with Africa in the thirteenth–fourteenth centuries, based on Musarra (2020)'s re-elaboration of a map in Beneš (2018) (*Map 1* in Appendix D.1—Figure D1).

We also collected alternative port configurations for a different period. According to Harvard's *WorldMap*, in the eleventh–twelfth centuries the ports with African routes were Genoa, Venice, Messina, Reggio Calabria, Naples, and Amalfi.[14] Another source lists Venice, Messina, Reggio Calabria, Amalfi, Naples, Palermo, Genoa, Pisa, Cagliari, and Syracuse for the same period.[15]Five ports recur across configurations—Genoa, Venice, Messina, Reggio Calabria, and Naples—with Venice as the only major Adriatic hub, while the others are located on the western Mediterranean coast. In the main analysis, we use the configuration shown in *Map 1* (Fig. 1) and replicate the analysis with the other two configurations (*Maps 2 and 3*) and a pooled set of all ports (*Map 4*), as shown in Appendix D.3.

[10] Data: Ministry of the Interior Open Data, https://elezioni.interno.gov.it/opendata.

[11] In 2006, we exclude *UDEUR* from *L'Unione* due to its EPP affiliation and later center-right alliances (2009–2014).

[12] Official bodies provide only aggregate data; Lunaria reports municipal-level events.

[13] Source: Centro di Documentazione Ebraica Contemporanea (CDEC).

[14] This map is available at https://www.arcgis.com/home/webmap/viewer.html?url=https://services7.arcgis.com/iEMmryaM5E3wkdnU/ArcGIS/rest/services/Sea_Trade_Routes_of_Medieval_Europe/FeatureServer/0&source=sd and is shown in *Map 2* in Appendix D.2 (Figure D3).

[15] The author of the map is Martin Jan Mansson, and the map can be found at: https://kottke.org/tag/Martin\%20Jan\%20Mansson and is reported in Map 3 in Appendix D.2 (Figure D4).

2.3 Distances in the medieval era

We define exposure to a medieval port as the distance between a respondent's municipal residence centroid and the nearest port centroid falling below a given threshold. Distances are computed along the Roman road network (117 A.D.), on which much Medieval travel relied, using data from McCormick et al. (2013) via the DARMC (digitized Barrington Atlas—Talbert (2000)).

We integrate Roman roads with the Italian National Institute of statistics (ISTAT) municipal boundaries and the medieval port locations (*Map 1*). Each municipality is matched to its single nearest medieval port along the network. Although the left panel of Figure D2 in Appendix D.1 shows straight connectors for readability, distances are always measured along roads; the right panel illustrates, as an example, the actual route between Genoa and an inland municipality. When a centroid lies off-network, we connect it with a straight segment to the nearest road point (Flückiger et al. 2022).

We then construct a dummy equal to 1 if the respondents' municipality lies within 10, 15, or 20 km of the nearest port, and 0 otherwise; these thresholds correspond to typical walking ranges in the Middle Ages (Fonseca 2000). We replicate this procedure for the other port configurations (Section 2.2). Figure E2 in Appendix E illustrates the case of Naples: panel (A) shows shaded centroid–port distances, while panel (B) details Campania's Roman roads.

2.4 Control variables

We include a rich set of controls. Personal controls (from the survey) cover age, education, marital status, gender, employment, student status, and parents' occupation (proxying family income).

Geographic controls address local factors potentially correlated with both medieval port placement and contemporary ideology: geodetic distance to the sea and to Tunis (a proxy for pirate-raid risk; Accetturo et al. (2024)), latitude and longitude. We also include territorial features such as terrain ruggedness [16] and an accessibility index from Beria et al. (2017); urban/rural status from Schaub and Morisi (2020), as well as data on resident population (2017) and population density (2001) from the ISTAT's "Atlante Statistico dei Comuni".

Socioeconomic controls (municipal level) include average income in 2017 (ISTAT, "Atlante Statistico"[17]), the number of manufacturing local units, average firm size (employees per local unit in 2017), geodetic distance to the nearest NUTS-3 and NUTS-2 capitals, population growth 2001–2017 (capturing correlates of protest-voting; (Algan et al. 2017)), the share of population without broadband access in 2015 (Schaub and Morisi 2020), and police-protection expenditures (Bove et al. 2019).

[16] Authors' elaboration from Nunn and Puga (2012).

[17] This variable is constructed using tax declaration records.

Fig. 1 Medieval ports configuration. *Source:* Authors' elaboration based on McCormick et al. (2013) and ISTAT administrative limits at the municipal level

As a proxy for social capital, we use the number of non-profit associations per resident (2001).[18]Regarding immigration, we consider the 2017 municipal share of foreign residents and the share of migrants from Africa (ISTAT).

Finally, we include historical controls primarily based on Guiso et al. (2016): city size in the 1300s (*Large* if population > 10,000, *Medium* if 1000–10,000) and a dummy for bishop seats before 1000 C.E. as a proxy for medieval city status. We also compute geodetic distance to the nearest late-medieval trade city using Wahl (2016).[19]

[18] For further details, see Tommaso Nannicini's personal website: https://www.tommasonannicini.eu/en/research/measures-of-social-capital-for-italian-provinces-and-municipalities/.

[19] According to Wahl (2016), the full list of medieval trade cities in Italy includes: Genova, Como, Milano, Mantova, Bolzano, Trento, Verona, Treviso, Venezia, Padova, Udine, Parma, Bologna, Lucca, Firenze, Prato, Pisa, Siena, Ancona, Roma, Napoli, Bari, Taranto, Brindisi, and Lecce.

2.5 Descriptive statistics

Table 1 below shows the main descriptive statistics for both individual- and municipality-level variables included in the analysis. For the reader's convenience, we report separate information for individuals (and their respective municipalities) who reside near or far from a medieval port, using a 15 km threshold based on *Map 1*. Alongside standard descriptive statistics, we provide the *p*-value for the difference of means (Delta). Data reported in Table 1 suggests that individuals are very similar in terms of personal characteristics, whereas—as expected—cities close to a medieval port compared to those further away have peculiarities mainly related to urban dimension, e.g., they show higher resident population, population density, income, and manufacturing firms. Similar patterns are observed in geographical and historical dimensions. Finally, Table D1 in Appendix D reports, for our preferred port configuration (*Map 1*) and each distance cut-off, both the number of treated individuals and their municipalities of residence.

3 Identification strategy

Our empirical analysis examines the impact of living close to a medieval port on a range of individual attitudes, including negative perception of migrants (i.e., that migrants make Italy an unsafe place) and the propensity to adopt an extreme right-wing political position or vote for a right-wing party. To this end, we estimate various versions of the following linear probability model [20]:

$$y_{i,m,r} = \alpha_r + \beta ProxMedPort_{i,m,r} + X_m\pi + W_i\phi + \in_{i,m,r,} \quad (1)$$

where i denotes an individual, m a municipality, and r a NUTS-3/2 region; in turn, $y_{i,m,r}$ alternately measures our three main outcomes. The key regressor, $ProxMedPort_{i,m,r}$, is a dummy equal to 1 if the individual lives within 10 (15) km of a medieval port and 0 otherwise (according to *Map 1*).[21]The W_i vector includes age, education, marital status, gender, and parents' employment status; X_m includes geographic, economic, social and historical municipality-level controls (e.g., latitude/longitude, terrain asperity, distances to Tunis/sea, accessibility, population, population density, urban/rural dummy; average income per capita, manufacturing intensity, average firm size, distance to NUTS-2/3 capitals, broadband coverage, police spending, 2001–2017 population growth; share of migrants and the share of African over total migrants; number of non-profits per capita; presence of a bishopric pre-1000 C.E., medieval city size, distance to a medieval trade center). Province fixed effects α_r absorb unobserved local heterogeneity, and standard errors are clustered at the province level.[22]

[20] Note that Appendices E and F also report results from probit and ordered logit specifications.
[21] Results remain broadly consistent across *Map 2*, Map 3, and *Map 4*.
[22] Province fixed effects capture local legacies of past institutions/dominations (Di Liberto and Sideri 2015), mitigating concerns about joint evolution of culture and institutions (Bisin and Verdier 2024).

Table 1 Descriptive statistics

	Proximity to medieval port = 0			Proximity to medieval port = 1				
	Mean	Sd	Obs	Mean	Sd	Obs	Delta	*p*-value
Individual level variables								
Far-right political positioning	0.26	0.44	1728	0.17	0.37	131	0.09	0.051
Center-right voting intention	0.22	0.41	1728	0.10	0.31	131	0.11	0.005
Migrant perception	0.20	0.40	1728	0.11	0.31	131	0.10	0.025
Intertemporal preferences	0.13	0.34	1728	0.09	0.29	131	0.04	0.270
Religious pluralism	0.21	0.41	1728	0.26	0.44	131	−0.06	0.312
Economic migrant perception	0.19	0.39	1728	0.10	0.31	131	0.08	0.052
Age	27.56	4.65	1728	27.44	4.05	131	0.12	0.810
Mother occ. status (0 = not employed 1 = employed)	0.46	0.50	1728	0.29	0.46	131	0.16	0.003
Father occ. status (0 = not employed 1 = employed)	0.74	0.44	1728	0.79	0.41	131	−0.06	0.277
Educational attainment (1 = no educ. 4 = postgraduate)	2.13	0.66	1728	2.10	0.73	131	0.04	0.727
Marital status (0 = never married 1 = ever married)	0.20	0.40	1728	0.14	0.35	131	0.06	0.121
Gender (male = 0 female = 1)	0.46	0.50	1728	0.42	0.50	131	0.04	0.496
Student status (yes = 0 no = 1)	0.66	0.47	1728	0.65	0.48	131	0.02	0.800
Occupational status (employed = 0 unemployed = 1)	0.46	0.50	1728	0.59	0.49	131	−0.13	0.041
Municipal level variables								
Distance from Tunis (km)	777.57	204.01	863	601.49	132.82	20	176.08	0.000
Ruggedness	1.29	1.57	863	1.24	1.24	20	0.06	0.838
Distance from the sea (km)	56.09	53.21	863	5.02	3.07	20	51.07	0.000
Accessibility	106.53	41.50	863	107.45	29.33	20	−0.93	0.888
Urban area (rural = 0 urban = 1)	0.73	0.45	863	1	0	20	−0.27	0.000
Population density (2001)	701.44	966.00	863	4,843.62	4,206.65	20	−4,142.18	0.000
Population (inhabitants)	31,906.69	117,299.90	863	179,234.60	262,412.20	20	−147,327.91	0.010

Table 1 (continued)

	Proximity to medieval port = 0			Proximity to medieval port = 1				
	Mean	Sd	Obs	Mean	Sd	Obs	Delta	*p*-value
Population growth (*ln*Pop2017-*ln*Pop2001)	0.07	0.12	863	− 0.02	0.07	20	0.09	0.000
Income (thousand euros)	13,323.42	3745.99	863	10,804.10	3477.15	20	2519.32	0.001
Manufacturing firms	0.75	0.48	863	0.53	0.33	20	0.22	0.003
Pop. without broadband (% on total pop.)	0.01	0.02	863	0.00	0.01	20	0.01	0.000
Police spending (per capita)	36.84	22.04	863	54.68	24.19	20	− 17.84	0.001
Distance from today's ports (km)	184.35	108.45	863	54.70	44.85	20	129.65	0.000
Foreigners (% on total pop.)	7.05	4.21	863	4.52	3.36	20	2.52	0.000
Africans (% on total foreigners)	21.39	12.73	863	15.63	9.12	20	5.76	0.005
Nonprofit associations (per capita)	0.00	0.00	863	0.00	0.00	20	0.00	0.001
Medieval large city (Yes = 1 No = 0)	0.04	0.20	863	0.25	0.44	20	− 0.21	0.032
Bishop site (yes = 1 no = 0)	0.19	0.39	863	0.45	0.51	20	− 0.26	0.022
Medieval medium city (Yes = 1 No = 0)	0.03	0.18	863	0.10	0.31	20	− 0.07	0.316
Distance from medieval trade city (km)	88.69	112.69	863	88.07	130.26	20	0.62	0.983
Average manufacturing firm size (n. employees)	3.46	1.51	863	3.22	0.80	20	0.23	0.203
Distance from nearest NUTS-3 capital city	18.52	12.42	863	8.85	13.66	20	9.67	0.001
Distance from nearest NUTS-2 capital city	54.37	40.23	863	37.37	56.07	20	17.00	0.167

Notes: In the computation of the descriptive statistics, sample weights are applied for individual level variables. The sample is split according to the variable *ProxMedPort*. The descriptive statistics on the distance from a medieval port refers to *Map 1*. To simplify the interpretation of descriptive statistics, the categorical variables on parental occupational status and marital status were recorded as dummies.*Individual level variables' source:* Osservatorio Giovani 2017, IPSOS, Giuseppe Toniolo Institute of Higher Education. The database refers to young adults with at least 20 years of age. *Municipal level variables sources:* see Section 2.

We also estimate municipal-level versions of Eq. (1), where outcomes are, alternatively, post-World War II right-/left-vote shares, dummies for 2013–2017 xenophobic attacks, or for Jewish arrests during the Nazi occupation. Controls X_m mirror the above (when available), and the main regressor is $ProxMedPort_{m,r}$, equal to 1 if the municipal centroid lies within 15 km of a medieval port, and zero otherwise.

Estimating Eq. (1) by OLS assumes that, conditional on controls and province fixed effects, $ProxMedPort_{i,m,r}$ is as-good-as randomly assigned. As noted, distances are measured along the ancient Roman road network, which is predetermined relative to medieval ports. Geographic and historical controls, plus NUTS-3 fixed effects, should support a correct identification.

Among historical controls, the most important are city population in 1300 (proxying economic activity), bishopric status (proxying city's religious and political prominence), and distance to the nearest medieval trade center (ensuring we are not capturing the impact of generic trade). We also include distance to Tunis to proxy the threat from Muslim pirate raids (notably from the XVI century), which may shape attitudes toward Muslims.

Further geographic features (e.g., ruggedness) capture very long-run local growth patterns and interaction frictions affecting generalized trust (Buggle and Durante 2021). In some specifications, we also add contemporaneous socio-economic controls. Finally, some specifications control for the current stock of migrants and the relative share of migrants from Africa to rule out that present-day exposure to migrants drives results.[23]

We are careful to show that our main results are reasonably stable across specifications when we alternatively add different sets of controls. Along this line, we use the Oster (2019) test to verify that the role played by selection on unobservables does not pose a major threat to identification in our empirical context. Ultimately, among the various robustness checks and placebos, we show that our results are confirmed if we identify the effects of medieval ports only exploiting variation near medieval ports with no longer-relevant port activity; moreover, we show that, in the case of medieval ports with no trade links to Africa, we do not find differences in voting intentions and migrant perceptions.

4 Empirical results

4.1 Baseline analysis

In Table 2 (columns (1)–(4)), we report OLS estimates of Eq. (1), where the dependent variable is a dummy equal to one for individuals reporting a far-right political position. Panel A considers as "close" those residents within 10 km of a medieval port, Panel B within 15 km, and Panel C within 20 km. Column (1) shows estimates of the baseline model that includes province fixed effects and personal/geographic

[23] However, if migrant stocks reflect local anti-migrant sentiment or politicians' opposition, controlling for them may be a bad control (Bracco et al. 2018). Reassuringly, we will show that including the stock of (African) migrants does not alter the coefficient of interest.

controls, while in columns (2)–(4) historical, socio-economic, social capital, and migrant-related variables are progressively added in the specification.

The coefficient of *ProxMedPort* is consistently negative, precisely estimated, and stable across specifications for individuals within 10–15 km of a medieval port. In Panel A, proximity to medieval ports lowers the probability of far-right positioning by roughly 20%, a large effect given the 20% sample mean. The magnitude is similar at 15 km (Panel B) but halves and loses significance at 20 km (Panel C). This attenuation is consistent with historical mobility constraints: before the nineteenth century, travel was mostly on foot (Fonseca 2000), and a 20 km distance—about five hours' walk—likely limited contacts with sailors and slave communities. These findings are robust to non-linear estimation, since Probit results shown in Table E1 (Appendix E) yield similar marginal effects, confirming that the linearity assumption of the linear probability model does not drive the results.

Columns (5)–(8) report results from replicating the analysis using as the dependent variable a dummy equal to one for individuals declaring a voting intention for right-wing parties, i.e., a party within the right-wing coalition.[24] The pattern of estimated coefficients mirrors what emerges from columns (1)–(4): proximity to medieval ports, especially within 15 km, reduces the likelihood of right-wing coalition voting intentions.[25]

Finally, we examine whether individuals perceive migrants as making Italy unsafe. The estimates shown in columns (9)–(12) are consistent with the previous analysis: those living near medieval ports are 15–18% less likely to consider migrants a threat, a large effect given that 16% of respondents express this belief.[26]

These results are relevant because political and cultural orientations formed in young adulthood tend to persist over time. We argue that, although our sample mainly includes younger individuals, the findings likely extend to the general population; indeed, younger cohorts, being more active on social media and exposed to diverse cultural environments, may even display attenuated historical influences: if so, our estimates might be considered conservative.[27]

In the next section, we examine the main threats to identification by considering various placebo analyses.

4.2 Threats to identification

In Section 4.1 we have shown that our main results are robust to the progressive inclusion of a large set of controls. In this section, we assess further potential threats

[24] For consistency, we use the same sample of respondents who answered the political positioning question.

[25] Probit marginal effects in Table E2, Appendix E, broadly confirm these estimates.

[26] Probit marginal effects are consistent with the linear probability results; see Table E3, Appendix E. The results reported in Table 2 remain valid when using the port configurations from *Maps 2*, *3*, and *4*. For further details, see Appendix F, Table F6.

[27] Using the 2018 ITANES survey, we compared individuals younger than 35 with older respondents on far-right preferences and right-coalition voting, controlling for province, gender, education, residence type, and occupation. Differences were minimal (1–3 percentage points) and statistically insignificant for right-coalition voting, suggesting broadly similar patterns across age groups, consistent with O'Grady (2023). Full results are available upon request.

Table 2 Proximity to medieval port and political/migrant attitudes: OLS results for far- right positioning, centre-right voting intention, and migrant perception

Dependent variable:	Far-RightPositioning				CentreRightVotingIntention				MigrantPerception			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Panel A: 10 km												
ProxMedPort	–0.184***	–0.186***	–0.205***	–0.202**	–0.110*	–0.090	–0.056	–0.071	–0.146***	–0.156***	–0.209***	–0.188***
	(0.056)	(0.057)	(0.076)	(0.079)	(0.066)	(0.069)	(0.093)	(0.092)	(0.032)	(0.042)	(0.056)	(0.055)
R-squared	0.181	0.185	0.199	0.200	0.198	0.201	0.225	0.226	0.212	0.218	0.229	0.235
Panel B: 15 km												
ProxMedPort	–0.216***	–0.224***	–0.241***	–0.240***	–0.174***	–0.162**	–0.130*	–0.150**	–0.108***	–0.130***	–0.189***	–0.162***
	(0.051)	(0.057)	(0.073)	(0.075)	(0.066)	(0.071)	(0.074)	(0.076)	(0.034)	(0.034)	(0.049)	(0.051)
R-squared	0.182	0.187	0.201	0.201	0.200	0.203	0.226	0.228	0.211	0.218	0.229	0.234
Panel C: 20 km												
ProxMedPort	–0.107	–0.108	–0.131	–0.124	–0.034	–0.022	–0.028	–0.045	–0.042	–0.049	–0.083	–0.062
	(0.082)	(0.076)	(0.086)	(0.094)	(0.097)	(0.093)	(0.099)	(0.099)	0.045)	(0.048)	(0.059)	(0.063)
R-squared	0.179	0.184	0.197	0.198	0.197	0.200	0.224	0.225	0.210	0.216	0.225	0.232
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Personal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Geography	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
History	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Socio-eco	No	No	Yes	Yes	No	No	Yes	Yes	No	No	Yes	Yes
Social capital	No	No	Yes	Yes	No	No	Yes	Yes	No	No	Yes	Yes
Migrants	No	No	No	Yes	No	No	No	Yes	No	No	No	Yes
Observations	1,859	1,859	1,859	1,859	1,859	1,859	1,859	1,859	1,859	1,859	1,859	1,859
Mean dep. var.	0.204	0.204	0.204	0.204	0.171	0.171	0.171	0.171	0.157	0.157	0.157	0.157

Notes: All specifications are estimated by ordinary least squares. The dependent variables are FarRightPositioning, CentreRightVotingIntention, and MigrantPerception, as indicated in the column headers. The main independent variable is ProxMedPort, the dummy variable indicating the (historical) proximity to a medieval port according to port configuration as reported in *Map 1* (for further details see Section 2.2). In Panel A, individuals whose municipality of residence is within (or beyond) the 10 km distance calculated in Roman roads are considered close (or distant) from one of the medieval ports. In Panel B we use a distance of 15 km, while in Panel C we use a distance of 20 km. Personal controls involve: age, occupational status (either studying or working), educational attainment, marital status, gender, and parental (mother and

Table 2 (continued)

father) incomes, as proxied by a measure of the employment status. Geography controls (at the municipal level) include: latitude, longitude, an index of terrain asperity, the geodetic distance both from Tunis and from the sea, an index of accessibility, resident population in 2017, population density in 2001 and a variable related to whether a city is in a rural or urban area. Socio-economic controls (at the municipal level) entail: average income per capita of the municipality of residence, the number of manufacturing firms in 2017 (per capita), the average firm size, the distance to the nearest regional and provincial capital city, the broadband internet coverage, police spending per capita, and the (log) population growth rate between 2001 and 2017. The migrants measure refers to the % of foreigners in the total population in 2017 in each municipality and the share of Africans over total immigrants. Social capital is measured by number of non-profit associations per capita in each municipality in 2001. Historical controls (at the municipal level) encompass: an indicator whether the city was a seat of a bishop before 1000 C.E., two dummy variables accounting for the size of city in year 1300 C.E (medium or large), and the distance (km) from the nearest medieval trade center. The sample weights are applied. All specifications include regional fixed effects at NUTS-3 level. Standard errors are clustered at NUTS-3 level. The statistical significance of the test that the underlying coefficient is equal to zero is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

to identification. First, we show that our main results are unlikely to be driven by local unobservables jointly affecting attitudes toward migrants and political views. Indeed, the gradual increase in R^2 across specifications, together with the stability of the main coefficient, indicates that additional controls improve explanatory power without altering the key estimates. Following Altonji et al. (2005), this pattern suggests limited bias from unobservables. Moreover, results from the Oster (2019) test (Table E8, Appendix E) confirm coefficient stability. Under the (strong) assumption that the effects of unobservables is proportional to that of observables ($\delta = 1$), the Oster test suggests that selection on unobservables is unlikely to play a major role.[28]

Next, we discuss placebo and robustness analyses designed to show that our findings are not driven by port status per se and remain robust when altering the control group definition to enhance comparability between treated and control municipalities.

In the left panel of Table 3, we regress each of the three outcome variables on a dummy equal to one for individuals living near one of Italy's ten major contemporary ports.[29]While some overlap exists with medieval ports, many of today's key seaports did not exist in the Middle Ages. Following Jha (2013), this placebo test verifies whether unobserved factors linked to modern port status—such as wealth or human capital—rather than medieval sea-trade experience, explain current anti-migrant attitudes and right-wing positioning. Reassuringly, the coefficients in Table 3 are close to zero and largely insignificant.[30] We then jointly control for proximity to both medieval and modern ports; given their partial overlap, this strategy amounts to identifying the impact of medieval ports only through variation induced by those that, for various reasons, lost relevance over time.[31] Results in the right panel of Table 3 confirm that the medieval-port effect remains statistically significant, with magnitude similar to the baseline, and the difference between the two proximity measures is significant at conventional levels.

We further test the robustness of our results by adding, as a control variable, a dummy equal to one for individuals living 15–30 km from a medieval port, thus allowing a comparison between individuals very close (0–15 km) and those slightly farther away. Results in Table 4 confirm our main results. By contrast, coefficients for individuals living 15–30 km away are close to zero and statistically insignificant; in most cases, we can reject equality between the two estimates.[32]

[28] Results are also robust when Eq. (1) is estimated with NUTS-2 instead of NUTS-3 fixed effects. Full results are available upon request.

[29] We use data from the 2017 Assoporti ranking of Italian commercial ports and compute the geodetic distance of each municipality from these ten ports: Trieste, Genova, Cagliari, Livorno, Gioia Tauro, Augusta, Messina, Ravenna, Venezia, Napoli. Source: https://www.assoporti.it/it/autoritasistemaportuale/statistiche/statistiche-annuali-complessive/.

[30] This result holds even when considering the 15 largest modern ports. Full results are available upon request.

[31] Unlike Jha (2013), we cannot restrict the analysis to ports that ceased activity for fully exogenous reasons (e.g., silting), as their number is too small to yield meaningful estimates.

[32] Although all regressions control for urban size as of 1300 C.E., we test for heterogeneous effects by interacting proximity with medieval city size (large: >30,000 inhabitants; medium-small otherwise). Results are consistent with our baseline findings, and the differences in coefficients are never statistically significant, suggesting that the observed effects are driven by sea-trade experience itself rather than early urbanization. Results are available upon request.

Table 3 Far-right positioning, centre-right voting intention, migrant perception, and proximity to medieval, today's 10 most important ports: OLS estimates

Dependent variable:	Far-RightPositioning		CentreRightVoting Intention		MigrantPerception		FarRightPositioning		CentreRightVoting Intention		MigrantPerception	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
ProxMedPort	-	-	-	-	-	-	–0.250***	–0.245***	–0.216***	–0.175**	–0.167***	–0.206***
							(0.057)	(0.080)	(0.060)	(0.071)	(0.041)	(0.058)
ProxTodayPort	–0.006	–0.061	0.026	0.011	0.086	0.052	0.082	0.015	0.102*	0.065	0.145	0.116
	(0.067)	(0.071)	(0.061)	(0.065)	(0.094)	0.096)	(0.067)	(0.072)	(0.060)	(0.064)	(0.098)	(0.094)
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Personal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Geography	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
History	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Socio-eco	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Social capital	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Migrants	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
R-squared	0.178	0.197	0.197	0.225	0.210	0.232	0.183	0.201	0.202	0.228	0.213	0.236
Observations	1,859	1,859	1,859	1,859	1,859	1,859	1,859	1,859	1,859	1,859	1,859	1,859
Mean dep. var.	0.204	0.204	0.171	0.171	0.157	0.157	0.204	0.204	0.171	0.171	0.157	0.157
$H_0: \beta_1$ProxMedPort = β_2ProximityTodayPort (for medieval + today model)												
							0.332***	–0.261**	–0.317***	–0.240**	0.312**	–0.322**
							(0.102)	(0.123)	(0.091)	(0.098)	(0.124)	(0.126)

Notes: All specifications are estimated by ordinary least squares. The dependent variables are: FarRightPositioning, the dummy related to far right political positioning, in Columns (1,2,7,8); CentreRightVotingIntention, the dummy related to the intention to vote for at least one party among Forza Italia, Fratelli d'Italia, Lega Nord, in Columns (3, 4,9,10) and MigrantPerception, the dummy related to the perception that migrants make Italy an unsafe place, in Columns (5, 6, 11, 12). The variable ProxMedPort is the dummy variable indicating the (historical) proximity (15 km distance calculated in Roman roads) to a medieval port according to port configuration as reported in *Map 1* (for further details see Section 2.2), and ProxTodayPort is the dummy variable indicating the proximity (less than 15 km geodetic distance) to at least one among the 10 most important today's ports. Personal controls involve: age, occupational status (either studying or working), educational attainment, marital status, gender, and parental (mother and father) incomes, as proxied by a measure of the employment status. Geography controls (at the municipal level) include: latitude, longitude, an index of terrain asperity, the geodetic distance both from Tunis and from the sea, an index of accessibility, resident population in 2017, population density in 2001 and a variable related to whether a city is in a rural or urban area. Socio-economic controls (at the municipal level) entail: average income per capita of the municipality of residence, the number of manufacturing firms in 2017 (per capita), the average firm size, the distance to the nearest regional and provincial capital city, the broadband internet cover-

Table 3 (continued)

age, police spending per capita, and the (log) population growth rate between 2001 and 2017. The migrants measure refers to the % of foreigners in the total population in 2017 in each municipality and the share of Africans over total immigrants. Social capital is measured by number of non-profit associations per capita in each municipality in 2001. Historical controls (at the municipal level) encompass: an indicator whether the city was a seat of a bishop before 1000 C.E., two dummy variables accounting for the size of city in year 1300 C.E (medium or large), and the distance (km) from the nearest medieval trade center. The sample weights are applied. All specifications include regional fixed effects at NUTS-3 level. Standard errors are clustered at NUTS-3 level. The statistical significance of the test that the underlying coefficient is equal to zero is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

In Appendix E, we present a placebo test assessing whether the null effect of proximity to medieval ports within 0–20 km persists at greater distances. We re-estimate our baseline model for individuals living within 25, 30, 35, and 40 km from a medieval port. As shown in Table E4, all coefficients remain small and statistically insignificant at the 5% level.[33]

It is worth recalling that all regressions control for distance from the nearest medieval trade center, ensuring that the estimated effect captures trade with Africa or the Middle East rather than trade activity per se. In Table 5, we further explore the role of sea trade by controlling for individuals living near medieval ports that, according to historical sources, had no such trade links.[34] Comparing individuals close to these two groups of ports minimizes unobserved differences linked to port status, isolating the role of trade with Muslim Africa and the Middle East. Results confirm our baseline findings: proximity to African-linked medieval ports remains negatively associated with our three outcomes, whereas coefficients for other ports are never statistically significant or positive.[35]

In the same spirit, in Appendix E, we show that distance from medieval ports is not spuriously capturing distance from the sea, which Nunn and Wantchekon (2011) found to reduce trust in the case of African areas exposed to the slave trade. We approach this in two ways.[36] First, we drop the dummy capturing distance from a medieval port, and we show that distance from the sea is never correlated with any of the outcome variables, confirming that distance from the sea per se does not matter in driving political positions and migrant's perceptions (see Table E5). Additionally, we restrict the control sample to individuals living close to the sea (within 15 km): in this way, we should have a control sample of individuals living in areas that are more similar to those close to medieval ports. Despite the fall in the number of observations, which slightly reduces estimates' precision, results reported in Table E6 closely mirror those in the baseline estimates from Table 2.

In our baseline regressions, distances from medieval ports are computed along the ancient Roman road network, which largely overlapped with the medieval one. In Table E7 we reproduce the results in Table 2 using distance computed either with the modern road network (Panel A) or with geodetic distance (Panel B). Using modern roads, individuals living near medieval ports remain less likely to hold far-right views or vote for the right coalition, though the latter estimates are less precise. In contrast, the coefficient on migrant perceptions is very close to zero and insignificant. Using geodetic distance, results are never significant at the 5% level, likely because both modern-road (built close to the ancient Roman network (De Benedictis et al. (2023))) and

[33] Baseline results are also robust to alternative distance definitions: estimates remain consistent when the 10, 15, and 20 km thresholds are varied by ±1 km. Results are available upon request.

[34] As primary historical sources, we used *Map 1* and the maps in Appendix D. Specifically, *Map 1* identifies several, Genoese trade centers (Bari, Barletta, Cagliari, Savona, Sanremo) without African connections. We also include Ancona, which *Map 3* shows as lacking a direct route to Africa.

[35] Moreover, the difference between the two coefficients is often statistically significant, at least in the case of variables capturing far-right political positions and beliefs on migrants.

[36] It is important to recall that all regression specifications control for distance from the sea.

Table 4 Spatial robustness check

Dependent variable:	Far-RightPositioning		CentreRightVoting Intention		MigrantPerception	
	(1)	(2)	(3)	(4)	(5)	(6)
ProxMedPort	–0.213***	–0.249***	–0.143*	–0.153*	–0.115**	–0.163**
	(0.064)	(0.080)	(0.083)	(0.092)	(0.048)	(0.063)
Dummy15–30km	0.009	–0.022	0.077	–0.006	–0.018	–0.003
	(0.066)	(0.071)	(0.105)	(0.101)	(0.055)	(0.069)
Region FE	Yes	Yes	Yes	Yes	Yes	Yes
Personal	Yes	Yes	Yes	Yes	Yes	Yes
Geography	Yes	Yes	Yes	Yes	Yes	Yes
History	No	Yes	No	Yes	No	Yes
Socio-eco	No	Yes	No	Yes	No	Yes
Social capital	No	Yes	No	Yes	No	Yes
Migrants	No	Yes	No	Yes	No	Yes
R-squared	0.182	0.201	0.201	0.228	0.211	0.234
Observations	1,859	1,859	1,859	1,859	1,859	1,859
Mean dep. var.	0.204	0.204	0.171	0.171	0.157	0.157
$H_0 : \beta_1 ProxMedPort = \beta_2$Dummy15−30km						
	–0.222***	–0.227***	–0.220***	–0.147	–0.097***	–0.160***
	(0.057)	(0.085)	(0.083)	(0.089)	(0.034)	(0.059)

Notes: All specifications are estimated by ordinary least squares. The dependent variables are: FarRightPositioning, the dummy related to far right political positioning, in Columns (1) and (2); CentreRightVotingIntention, the dummy related to the intention to vote for at least one party among Forza Italia, Fratelli d'Italia, Lega Nord, in Columns (3) and (4) and MigrantPerception, the dummy related to the perception that migrants make Italy an unsafe place, in Columns (5) and (6). The main independent variable is ProxMedPort, the dummy variable indicating the (historical) proximity to a medieval port according to port configuration as reported in *Map 1* (for further details see Section 2.2): individuals whose municipality of residence is within (or beyond) the 15 km distance calculated in Roman roads are considered close (or distant) from one of the medieval ports. The variable Dummy15-30km indicates whether an individual resides in a municipality between 15 and 30 km from the nearest medieval port. Personal controls involve: age, occupational status (either studying or working), educational attainment, marital status, gender, and parental (mother and father) incomes, as proxied by a measure of the employment status. Geography controls (at the municipal level) include: latitude, longitude, an index of terrain asperity, the geodetic distance both from Tunis and from the sea, an index of accessibility, resident population in 2017, population density in 2001 and a variable related to whether a city is in a rural or urban area. Socioeconomic controls (at the municipal level) entail: average income per capita of the municipality of residence, the number of manufacturing firms in 2017 (per capita), the average firm size, the distance to the nearest regional and provincial capital city, the broadband internet coverage, police spending per capita, and the (log) population growth rate between 2001 and 2017. The migrants measure refers to the % of foreigners in the total population in 2017 in each municipality and the share of Africans over total immigrants. Social capital is measured by number of non-profit associations per capita in each municipality in 2001. Historical controls (at the municipal level) encompass: an indicator whether the city was a seat of a bishop before 1000 C.E., two dummy variables accounting for the size of city in year 1300 C.E (medium or large), and the distance (km) from the nearest medieval trade center. The sample weights are applied. All specifications include regional fixed effects at NUTS-3 level. Standard errors are clustered at NUTS-3 level. The statistical significance of the test that the underlying coefficient is equal to zero is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Table 5 Far-right political positioning, centre-right voting intention, migrant perception, and proximity to medieval ports with and without trade routes with Africa

Dependent variable:	FarRight Positioning		CentreRightVoting Intention		Migrant Perception	
	(1)	(2)	(3)	(4)	(5)	(6)
ProxMedPort	–0.216***	–0.244***	–0.179***	–0.158**	–0.102***	–0.158***
	(0.052)	(0.075)	(0.066)	(0.075)	(0.034)	(0.051)
ProxMedPortNoAfrica	0.011	–0.065	–0.102	–0.131	0.128***	0.061
	(0.059)	(0.103)	(0.099)	(0.114)	(0.041)	(0.049)
Region FE	Yes	Yes	Yes	Yes	Yes	Yes
Personal	Yes	Yes	Yes	Yes	Yes	Yes
Geography	Yes	Yes	Yes	Yes	Yes	Yes
History	No	Yes	No	Yes	No	Yes
Socio-eco	No	Yes	No	Yes	No	Yes
Social capital	No	Yes	No	Yes	No	Yes
Migrants	No	Yes	No	Yes	No	Yes
R-squared	0.182	0.202	0.201	0.229	0.212	0.235
Observations	1,859	1,859	1,859	1,859	1,859	1,859
Mean dep. var.	0.204	0.204	0.171	0.171	0.157	0.157
$H_0 : \beta_1\ ProxMedPort = \beta_2\ ProxMedPortNoAfrica$						
	–0.227***	–0.179	–0.076	–0.027	–0.230***	–0.219***
	(0.072)	(0.125)	(0.104)	(0.125)	(0.038)	(0.059)

Notes: All specifications are estimated by ordinary least squares. The dependent variables are: FarRightPositioning, the dummy related to far right political positioning, in Columns (1) and (2); CentreRightVotingIntention, the dummy related to the intention to vote for at least one party among Forza Italia, Fratelli d'Italia, Lega Nord, in Columns (3) and (4) and MigrantPerception, the dummy related to the perception that migrants make Italy an unsafe place, in Columns (5) and (6). The variable ProxMedPort is the dummy variable indicating the (historical) proximity (15 km distance calculated in Roman roads) to a medieval port according to port configuration as reported in *Map 1* (for further details see Section 2.2), and ProxMedPortNoAfrica is the dummy variable indicating the proximity (15 km distance calculated in Roman roads) to a medieval port without trade routes with Africa. Personal controls involve: age, occupational status (either studying or working), educational attainment, marital status, gender, and parental (mother and father) incomes, as proxied by a measure of the employment status. Geography controls (at the municipal level) include: latitude, longitude, an index of terrain asperity, the geodetic distance both from Tunis and from the sea, an index of accessibility, resident population in 2017, population density in 2001 and a variable related to whether a city is in a rural or urban area. Socio-economic controls (at the municipal level) entail: average income per capita of the municipality of residence, the number of manufacturing firms in 2017 (per capita), the average firm size, the distance to the nearest regional and provincial capital city, the broadband internet coverage, police spending per capita, and the (log) population growth rate between 2001 and 2017. The migrants measure refers to the % of foreigners in the total population in 2017 in each municipality and the share of Africans over total immigrants. Social capital is measured by number of non-profit associations per capita in each municipality in 2001. Historical controls (at the municipal level) encompass: an indicator whether the city was a seat of a bishop before 1000 C.E., two dummy variables accounting for the size of city in year 1300 C.E (medium or large), and the distance (km) from the nearest medieval trade center. The sample weights are applied. All specifications include regional fixed effects at NUTS-3 level. Standard errors are clustered at NUTS-3 level. The statistical significance of the test that the underlying coefficient is equal to zero is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

coordinate-based distances are poor proxies for actual medieval travel paths, especially over short ranges (see D2 and E1), leading to misclassification of treatment status.[37]

Finally, we re-estimate our model for a subset of individuals likely to hold left-wing views and more universalist moral values, identified through municipal toponymy. As shown by Augustins (2004), Conedera et al. (2007), Weaver and Holtkamp (2016), and Oto-Peralías (2018), street names can proxy for local social and cultural traits.[38] Using the 2011 ISTAT population and housing census—covering 22 million street, road, and square names—we compute for each municipality the population-standardized share of streets dedicated to themes linked to the anti-fascist Resistance, left-wing politicians, or artists symbolizing tolerance and inclusion.[39] We classify as "progressive" those municipalities whose share exceeds the national average and include them in the sample so that we consider all individuals near medieval ports, plus those from municipalities meeting the above toponymic criterion farther away.[40] This procedure allows us to assess whether the effect of proximity to medieval ports still predicts attitudes toward migrants and right-wing positioning when comparing individuals from culturally progressive municipalities. Results in Table E9 (Appendix E) show that, even within culturally progressive contexts, individuals near medieval ports remain less likely to hold anti-migrant or right-wing views. This suggests that the medieval sea trade was the true "game changer".[41] The resulting coefficients average around zero, confirming that our findings are not mechanical.[42] Additional sensitivity checks are reported in Appendix F, where we explore the robustness of our main findings to alternative outcome definitions, to excluding individuals born in another province, to expand the set of contemporary controls capturing the economic structure of local areas and to assess the role played by localized shocks such as earthquakes and temperature variability.

4.3 Alternative mechanism and outcome variables

So far, our results suggest that the experience of cross-cultural trade altered the local population's perceptions of individuals with different cultures, religions, or

[37] With the 15 km threshold, 174 individuals are treated using geodetic distance, 148 with the modern road network, and 131 with Roman roads. Hence, several individuals classified as untreated in the baseline specification become treated under alternative measures, as shown in Figure D2 and Figure E1 (Appendices D and E).

[38] In Italy, the municipal council decides on street naming, and this process reflects the commemorative priorities of the community. Such process satisfies the criteria suggested by Oto-Peralías (2018) for considering the toponymy a valid instrument for studying social and cultural phenomena.

[39] We include politicians and thinkers such as Giacomo Matteotti, Antonio Gramsci, Palmiro Togliatti, Nilde Iotti, Enrico Berlinguer, Martin Luther King, and others; Resistance-related names, such as "25 April" and "Partisans"; and artists Fabrizio De André and Giorgio Gaber.

[40] The inclusion criterion applies only to municipalities far from medieval ports; all individuals near medieval ports are retained.

[41] As a final robustness check, we re-estimate the model using a randomly assigned fake proximity indicator (Figure E4, Appendix E).

[42] The ISTAT database lacks data for 72 municipalities in our sample, only one of which (Reggio Calabria) lies within 10 km of a medieval port. These are excluded.

ethnicities. We have argued that this is because sea trade fostered the development of a more generalized morality.

We now explore the possibility that our findings can instead be explained by an alternative theoretical mechanism. Indeed, trade with Africa and the Middle-East was, for Italian medieval port cities, a clear example of long-distance trade, typically requiring significant front-load investments which, besides being very risky, often took months or even years to yield returns. This, in turn, might have favored selection processes that led to the gradual emergence, in the local population, of cultural traits that favor patience and a more long-run orientation (Galor and Özak 2016). The latter might have contributed to a transformation of the local economic environment, for example increasing economic activities that require patience, such as finance, investment, and innovation. If this trait was transmitted to future generations, individuals now living close to the medieval ports might simply view migrants through the lens of the possible long-run benefits that might deliver to the local community, relative to the short-run adjustment costs they can in turn impose. In Table 6 we show, for the baseline and full-controls specifications, a regression where the outcome variable is a proxy for the short-term orientation, namely a dummy equal to one if the individual agrees that the present matters more than the future, and zero otherwise. Columns (1) and (2) of Table 6 show that, close to medieval ports, individuals are less likely to believe that the present is more important than the future, suggesting that a more future-oriented mindset might, at least in part, explain our results.[43] In columns (3)–(8), we re-run our baseline regressions on the three original outcome variables, but controlling for the short-term orientation of the individual, in the same spirit of Nunn and Puga (2012). Results suggest that, even controlling for the short-term orientation of the individual, our main results still hold. Interestingly, the coefficient for the short-term orientation dummy variable is negative but very small and not statistically significant in explaining far-right political positions; in turn, its coefficient is positive in the regressions for right-wing voting intentions as well as migrant perceptions, and in the latter case it is also statistically significant.

This suggests that a short-term orientation tends to be associated with a negative perception of migrants as well as with a (poorly estimated) larger probability to vote for the right-wing coalition, even after controlling for distance from a medieval port.

We have further explored this issue by conducting a formal causal mediating analysis which, under admittedly restrictive assumptions (Nguyen et al. 2022), might allow us to disentangle the impact of living close to a medieval port into an indirect effect (which goes through the mediator, namely a more future-oriented mindset favored by living close to a medieval port), and a direct effect, which should capture the effect of living close to medieval ports on political orientation and attitudes toward migrants via the stronger generalized morality we have emphasized (or via any other possible additional channel that does not work through the individuals'

[43] Let us recall that in our regressions we control for a set of first and second nature characteristics that could be correlated with the degree of long-term orientation, such as certain features of the terrain, distance from the sea, or distance from the closest market place, on top of the current socio-economic structure.

long term orientation).[44] Even if we do not want to push too much on these results, given the strong identification assumptions they require, the estimates, reported in Table E11 in Appendix E, show that the lower degree of short term orientation associated with living close to a medieval port (the indirect effect) might explain up to one third of the total effect in the case of having right-wing voting intentions as well as negative views of migrants, while it has no effect on the propensity to have far-right political positions. Taken at face value, these results suggest that a more future-oriented mindset—associated with the exposure to the long-distance sea trade—might play an important role in reducing current levels of xenophobia and right-wing voting intentions, but also that this is very unlikely to be the only channel. In other words, even if the trade experience with Africa might have contributed to a transformation of the local economy by changing the degree of long-term orientation of the local population, we believe that a cultural explanation of our findings might still be at least a valid complementary hypothesis.

Besides the impact of long-term orientation, in Table E12 (Appendix E), we explore the impact of living closer to medieval ports on other individuals' attitudes. In columns (1) and (2) we show that, close to medieval ports, individuals are more likely to have a positive view of religious pluralism, which is consistent with the existence of a more universalist morality. In turn, in columns (3) and (4), we explore the existence of differences between cultural and economic views of migrants, using a survey question on whether respondents perceive migrants as a burden for the Italian economy. Regression results indicate that, close to medieval ports, there is also a slightly lower probability that individuals think that migrants constitute a burden for the Italian economy; however, the coefficients are not statistically significant at conventional confidence levels. This finding suggests that cultural persistence, rather than opinions on other societal roles of migrants—such as their economic contribution—may be the key factor differentiating individuals living close to medieval ports.

5 Municipality level analysis

In this section, we move from survey data to "hard outcomes" observed at the municipality level. Its main aim is to show that results using survey data on young individuals are broadly confirmed when we move to "real" voting outcomes and consistent with other proxies of cultural attitudes.[45] The empirical analysis is based on the estimation of the following equation by either assuming a linear probability or a probit specification:

$$y_{m,r} = \alpha_r + \beta ProxMedPort_{m,r} + X_m\pi + \in_{m,r} \quad (2)$$

[44] The mediation analysis was conducted using the mediate command in STATA, assuming a linear model both for the outcome variables and for the mediator as well as allowing for an interaction effect of the treatment and the mediator in the outcome variable equations. See Nguyen et al. (2021) and Nguyen et al. (2022) for a discussion.

[45] Clearly, moving to municipality-level data might generate aggregation bias in the presence of heterogeneous. populations, so that they may fail to accurately reflect individual-level preferences. Empirical results in this section should therefore be viewed with this caveat in mind.

Table 6 Intertemporal preferences, far-right political positioning, centre-right voting intention, migrant perception and proximity to medieval ports

Dependent variable:	IntertemporalPreferences		FarRightPositioning		CentreRightVotingIntention		MigrantPerception	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ProxMedPort	–0.142***	–0.140**	–0.220***	–0.242***	–0.168***	–0.143*	–0.090***	–0.144***
	(0.053)	(0.065)	(0.050)	(0.075)	(0.064)	(0.074)	(0.032)	(0.050)
IntertemporalPreferences	.	.	–0.026	–0.019	0.042	0.050	0.127**	0.130**
	.	.	(0.054)	(0.052)	(0.052)	(0.049)	(0.055)	(0.051)
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Personal	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Geography	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
History	No	Yes	No	Yes	No	Yes	No	Yes
Socio-eco	No	Yes	No	Yes	No	Yes	No	Yes
Social capital	No	Yes	No	Yes	No	Yes	No	Yes
Migrants	No	Yes	No	Yes	No	Yes	No	Yes
R-squared	0.174	0.183	0.183	0.201	0.201	0.229	0.220	0.244
Observations	1,859	1,859	1,859	1,859	1,859	1,859	1,859	1,859
Mean dep. var.	0.120	0.120	0.204	0.204	0.171	0.171	0.157	0.157

Notes: All specifications are estimated by ordinary least squares. The dependent variables are: IntertemporalPreferences, the dummy variable indicating the short term orientation of individuals, in Columns (1) and (2); FarRightPositioning, the dummy related to far right political positioning, in Columns (3) and (4); CentreRightVotingIntention, the dummy related to the intention to vote for at least one party among Forza Italia, Fratelli d'Italia, Lega Nord, in Columns (5) and (6) and MigrantPerception, the dummy related to the perception that migrants make Italy an unsafe place, in Columns (7) and (8). The variable ProxMedPort is the dummy variable indicating the (historical) proximity (15 km distance calculated in Roman roads) to a medieval port according to port configuration as reported in *Map 1* (for further details see Section 2.2). In Columns (3) to (8) IntertemporalPreferences is included as a control variable. Personal controls involve: age, occupational status (either studying or working), educational attainment, marital status, gender, and parental (mother and father) incomes, as proxied by a measure of the employment status; Geography controls (at the municipal level) include: latitude, longitude, an index of terrain asperity, the geodetic distance both from Tunis and from the sea, an index of accessibility, resident population in 2017, population density in 2001 and a variable related to whether a city is in a rural or urban area. Socio-economic controls (at the municipal level) entail: average income per capita of the municipality of residence, the number of manufacturing firms in 2017 (per capita), the average firm size, the distance to the nearest regional and provincial capital city, the broadband internet coverage, police spending per capita, and the (log) population growth rate between 2001 and 2017. The migrants measure refers to the % of foreigners in the total population in 2017 in each municipality and the share of Africans over total immigrants. Social capital is measured by number of non-profit associations per capita in each municipality in 2001. Historical controls (at the municipal level) encompass: an indicator whether the city was a seat of a bishop before 1000 C.E., two dummy variables accounting for the size of city in year 1300 C.E (medium or large), and the distance (km) from the nearest medieval trade center. The sample weights are applied. All specifications include regional fixed effects at NUTS-3 level. Standard errors are clustered at NUTS-3 level. The statistical significance of the test that the underlying coefficient is equal to zero is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

where $y_{m,r}$ represents various outcomes defined at the level of municipality m in NUTS-3 region r, and *ProxMedPort* is our usual measure of proximity to a medieval port.[46] In turn, X_m includes a set of municipal-level controls, while α_r accounts for NUTS-3 province-level fixed effects. In particular, with the aim of maintaining a single set of controls for all years analyzed,[47] we include time-invariant geographic controls (i.e., longitude and latitude of the municipality centroid, index of terrain asperity, and the geodetic distance both from Tunis and from the sea) along with our standard set of historical variables. We also include socioeconomic controls for which data are available over the entire time interval (population size and distance to the nearest NUTS-2 capital). Moreover, in some specifications, we additionally control for population growth between 2001 and 2011 as a proxy for local economic growth.

In Table 7, columns (1) and (2) show the results of estimating Eq. 2 where $y_{m,r}$ is a dummy equal to 1 if, in municipality m of region r over the period 2013–2018, at least one racist and xenophobic attack occurred, and zero otherwise (see Fig. 2). Estimates show that, conditional on controls, municipalities located within 15 km of a medieval port exhibit an 11% lower probability of experiencing a racist attack in the OLS specification, although the estimate is slightly noisily estimated. By contrast, the marginal effect from the probit regression is larger in absolute value and statistically significant at the 1% level. Results are also confirmed when controlling for a dummy equal to one for municipalities located near the ten largest contemporary commercial ports (columns (5) and (6) of Table 7).

We now analyze whether "real" votes in National elections confirm our previous results, namely that proximity to a medieval port affects right-wing voting intentions in municipality m, conditional on controls.[48] As already noted, we focus on the 2018 national elections, as the 2014–2017 period saw a spike in refugee arrivals in Italy,[49] and we expect to observe fewer votes for right-wing parties in municipalities close to a medieval port. We also examine past national elections, selecting one per decade since the 1950s. We do not expect a negative correlation before the 1990 s, when migration was not a salient issue in Italian society and politics, and are more agnostic as far as it concerns the elections after the 1990 s, when migration was not as salient as in the 2014–2017 period, but opposition to migration featured in the right-wing parties' platforms alongside issues such as taxes, fiscal federalism, and EU opposition. In Table 8 we report OLS estimates of the above equation, where $y_{m,r}$ is the share of votes accruing to the right coalition.[50]

[46] For the full list of treated municipalities, see Table D2 in Appendix D.

[47] This is because the regression specifications consider outcomes referring to different historical periods.

[48] The Italian Parliament is composed of the Chamber of Deputies and Senate of the Republic. For the elections considered in this study, only the Chamber of Deputies was elected by citizens aged 18 years or older, while for the Senate only citizens aged 25 years or over could vote. Given the age target of our respondents (18–35 years old), in this analysis we consider the votes share obtained by the coalition in the Chamber of Deputies.

[49] See Figure D5 in Appendix D.

[50] See the notes to Table 8 for further details. Moreover, in Figure E3 in Appendix E, we show the distribution of votes for center-right and right-wing parties in the 2018 national election.

Table 7 Racist episodes/Jewish arrests and proximity to medieval port controlling for today's commercial ports

Dependent variable:	RacistEpisodes		JewishArrests		RacistEpisodes		JewishArrests	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ProxMedPort	–0.108*	–0.180***	–0.049*	–0.373***	–0.103	–0.140***	–0.055**	–0.389***
	(0.057)	(0.045)	(0.029)	(0.120)	(0.065)	(0.045)	(0.024)	(0.124)
ProxTodayPort	.	.	.	.	–0.013	–0.078*	0.018	0.030*
	.	.	.	.	(0.057)	(0.040)	(0.032)	(0.050)
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Geography	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
History	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Population	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Distance from	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
NUTS-2 capital city								
R-squared	0.184	.	0.146	.	0.184	.	0.146	.
Observations	7,450	7,450	7,450	5,282	7,450	7,450	7,450	5,282
Mean dependent variable	0.128	0.128	0.059	0.083	0.128	0.128	0.059	0.083

Notes: Specifications in columns (1), (3), (5), and (7) are estimated by ordinary least squares, while columns (2), (4), (6), and (8) are estimated by probit and report marginal effects. The dependent variable in columns (1), (2), (5), and (6) is RacistEpisodes (racist/xenophobic attacks between 2013 and 2018). The dependent variable in columns (3), (4), (7), and (8) is JewishArrests (deportations between 1943 and 1945). ProxMedPort indicates historical proximity (15 km via Roman roads) to a medieval port as reported in *Map 1* (see Section 2.2); ProxTo-dayPort indicates proximity (less than 15 km geodetic distance) to one of the 10 most important current ports. Specifications in columns (1)–(4) are estimated without controlling for proximity to modern commercial ports; columns (5)–(8) include the variable ProxTodayPort. Geography controls include latitude, longitude, terrain asperity, and geodetic distance to Tunis and to the sea. Distance from the nearest NUTS-2 capital city and population (2011 for racist episodes; 1951 for Jewish arrests) are also included, as well as population growth rate (2001–2011) for racist episodes. Historical controls include whether the city was a bishopric before 1000 C.E., city size in 1300 C.E. (medium or large), and distance to the nearest medieval trade center. Sample weights are applied. All specifications include NUTS-3 regional fixed effects. Standard errors are clustered at the NUTS-3 level. Significance: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

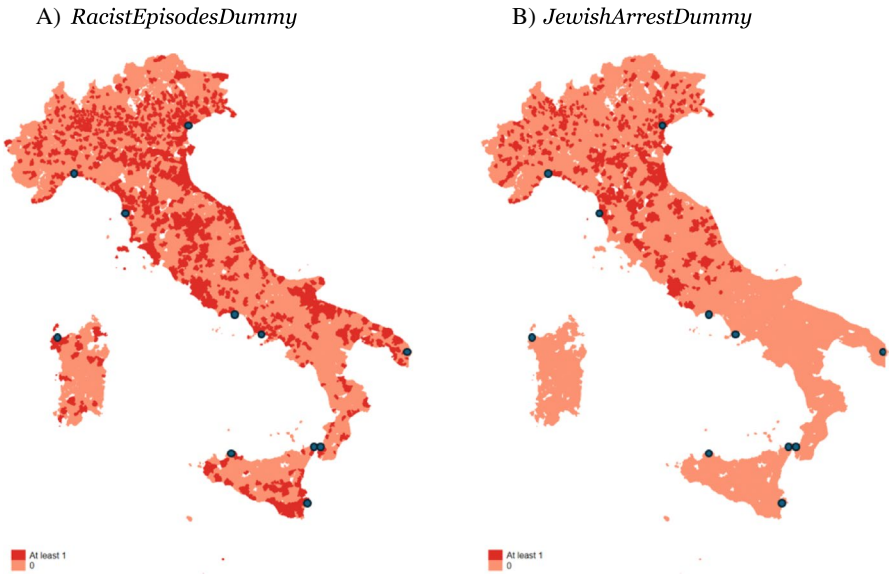

Fig. 2 Distribution of racist/xenophobic episodes and Jewish arrests. *Source:* authors' elaboration based on data on racist and xenophobic attacks (involving at least one case in the period 2013–2018) from the Lunaria association, published on the website "Cronache di ordinario razzismo" (**A**), and on data on arrests involving at least one Jewish individual during the period 1943–1945, retrieved from the Centro di Documentazione Ebraica Contemporanea (CDEC) Foundation (**B**)

In Appendix E (Table E13), we instead report estimates of the same equation but assuming a fractional regression modeling strategy.[51] In 2018, we find that the right-wing parties[52] received about 3.5 percentage points fewer votes in municipalities close to a medieval port.[53] By contrast, we do not find evidence that this was the case in previous national elections. In 1976 (and also in 1958, according to fractional regression estimates), the right-wing party even received more votes close to medieval ports, suggesting that these municipalities were not historically strongholds of

[51] We estimate the equation with quasi-maximum likelihood methods; moreover, we assume a probit model for the conditional mean. Estimation has been carried out with the fracreg command in Stata.

[52] Since the 1996 elections, when the electoral system included a significant majoritarian component favoring coalitions, we consider votes for the right-wing coalition under its different denominations (for further details, see Section 2). By contrast, before the 1990 s, when the system was purely proportional, we consider votes for the sole explicitly right-wing party, MSI-DN (Movimento Sociale Italiano-Destra Nazionale).

[53] See Appendix G for a discussion of the impact of possible spatial trends and autocorrelation in our data where we show, using the approach by Conley and Kelly (2025), that our results seem to be reasonably robust.

Table 8 Right-wing votes in national elections and proximity to medieval ports: OLS

Dependent Variable: RightVotesShare								
	1958	1968	1976	1987	1996	2006	2013	2018
	MSI Party	MSI Party	MSI Party	MSI Party	Polo per le Libertà	Casa delle *L*ibertà	Centre-Right and Right Wing Parties	Centre-Right and Right Wing Parties
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ProxMedPort	0.014	0.006	0.016***	0.001	0.004	–0.012	–0.002	–0.034**
	(0.010)	(0.004)	(0.004)	(0.003)	(0.033)	(0.031)	(0.021)	(0.016)
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Geography	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
History	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Population	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Distance from NUTS-2 capital city	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.289	0.287	0.454	0.323	0.579	0.605	0.558	0.706
Observations	7,450	7,323	7,450	7,450	7,016	7,450	7,442	7,355
Mean dependent variable	0.031	0.029	0.032	0.018	0.399	0.505	0.302	0.420

Notes: All specifications are estimated by ordinary least squares. The dependent variable is RightVotesShare, the variable related to the % of votes received by the right-wing parties in the National Election. Each Panel refers to a different year: 1958, 1968, 1976, 1987, 1996, 2006, 2013, and 2018. The main independent variable is ProxMedPort, the dummy variable indicating the (historical) proximity to a medieval port according to *Map 1* (for further details see Section 2.2). Geography controls (at the municipal level) include: latitude, longitude, an index of terrain asperity and the geodetic distance both from Tunis and from the sea. We also account for the distance from the nearest NUTS-2 capital city and the population in 1951 in column (1), in 1961 in column (2), 1971 in column (3), 1981 in column (4), 1991 in column (5), 2001 in column (6), 2011 in column (7), and 2017 in column (8). Furthermore, from column (2) to column (7) in each model the population growth rate compared to the population 10 years earlier is included, while in column (8) the model includes the population growth rate between 2011 and 2017. Historical controls (at the municipal level) take into account: an indicator whether the city was a seat of a bishop before 1000 C.E., two dummy variables accounting for the size of city in year 1300 C.E (medium or large), and the distance (km) from the nearest medieval trade center. The sample weights are applied. All specifications include regional fixed effects at NUTS-3 level. Standard errors are clustered at NUTS-3 level. The statistical significance of the test that the underlying coefficient is equal to zero is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

the Left; indeed, they occasionally had a respectable right-wing tradition.[54] Results reported in Table E10 of Appendix E confirm that the findings hold when controlling for distance from the current largest ports. Moreover, for the 2018 national elections, we were able to control for the share of migrants in the municipality as of 2011. Reassuringly, the main results, available upon request, remain virtually unaltered.

This reading of the evidence is reinforced by empirical results in Table 9, where we report estimates of the same equation, but with $y_{m,r}$ defined as either the vote share of the center-left coalition in national elections (since the 1990 s), or the Communist Party (before the 1990s).[55]

As we can see, all coefficients are zero, both statistically and in magnitude.

We believe that the voting pattern for right-wing parties might be seen as consistent with the importance of the salience of migration, so that when the latter was not an important issue in Italian politics, the exposition to the cultural humus of medieval ports did not reduce votes for right-wing parties. Conversely, once immigrants from diverse backgrounds became a salient political topic, more universalist cultural traits near medieval ports seem to have emerged. This interpretation can be further validated by exploiting the fact that the fascist regime passed, in 1938, the so-called Racial Laws, which contained a series of rules against Jews and other individuals of non-Italian origin (mainly Africans). In particular, weddings between Italian and Italian-Jews were forbidden, Jews were expelled from important positions in certain industries and professions, and Jewish children were generally not allowed to attend public schools. The fascist regime also conducted a specific census to identify and register the Jews living in Italy, which clearly simplified things when the Nazi and the fascist collaborationist government decided to deport Jews to the extermination camps over the period 1943–1945. Although data reported in Becker et al. (2022) show that Italy was the country with the lowest death rate of Jews during the Holocaust, nevertheless 17% of Italian Jews—approximately 8000 individuals—were estimated to have been killed during that period.

By exploiting information on Jewish arrests during the Holocaust, we estimate the linear probability model in Eq. (2) with OLS and, as a robustness check, by ML assuming a probit specification. In this case, $y_{m,r}$ is a dummy equal to 1 if, in municipality m of region r, at least an arrest of a Jewish individual occurred during the Holocaust, and 0 otherwise. Empirical results are reported in columns (3) and (4) of Table 7.[56] We find that, conditional on controls, in municipalities close to medieval ports, the probability that at least a Jew was arrested was about 5% lower than

[54] We also run similar regressions for a certain number of regional elections that took place in 2015, at the onset of the refugee crisis. Elections for the regional president and regional assemblies took place in Liguria, Campania, Marche, Puglia, Toscana, Umbria, and Veneto (covering about one-third of the Italian population). For consistency with the national elections, we have only considered votes received by national parties. Regression results, available upon request, indicate a reduction of approximately 5 percentage points in the share of votes for right-wing parties in municipalities close to medieval ports.

[55] Results remain robust if, prior to the 1990 s, we consider the aggregate vote shares of the Communist and Socialist parties.

[56] We cannot control for past economic growth, as in columns (1) and (2), due to lack of data and the disruptions caused by World War II. However, including municipality population growth between 1951 and 1961 as a proxy for growth potential does not alter the results.

Table 9 Left-wing votes in national elections and proximity to medieval ports: OLS

Dependent Variable: LeftVotesShare								
	1958	1968	1976	1987	1996	2006	2013	2018
	PCI Party	PCI Party	PCI Party	PCI Party	L'Ulivo+PRC	L'unione	It. Bene Comune	Centro-Sin.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ProxMedPort	0.009	0.024	0.014	0.003	–0.013	0.015	–0.002	–0.005
	(0.018)	(0.028)	(0.032)	(0.023)	(0.031)	(0.035)	(0.019)	(0.005)
Region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Geography	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
History	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Population	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Distance from NUTS-2 capital city	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared	0.471	0.525	0.521	0.535	0.844	0.568	0.570	0.608
Observations	7,450	7,323	7,450	7,450	7,016	7,450	7,442	7,355
Mean dep. var.	0.179	0.214	0.291	0.233	0.348	0.441	0.291	0.239

Notes: All specifications are estimated by ordinary least squares. The dependent variable is LeftVotesShare, the variable related to the % of votes received by the centre-left coalition in national elections (since the 1990s), or the Communist Party (before the 1990s). Each column refers to a different year: 1958, 1968, 1976, 1987, 1996, 2006, 2013, and 2018. The variable ProxMedPort is the dummy variable indicating the (historical) proximity (15 km distance calculated in Roman roads) to a medieval port according to port configuration as reported in *Map 1* (for further details see Section 2.2). Geography controls (at the municipal level) include: latitude, longitude, an index of terrain asperity and the geodetic distance both from Tunis and from the sea. We also account for the distance from the nearest NUTS-2 capital city and the population in 1951 in column (1), in 1961 in column (2), 1971 in column (3), 1981 in column (4), 1991 in column (5), 2001 in column (6), 2011 in column (7), and 2017 in column (8). Furthermore, from column (2) to column (7) in each model the population growth rate compared to the population 10 years earlier is included, while in column (8) the model includes the population growth rate between 2011 and 2017. Historical controls (at the municipal level) take into account: an indicator whether the city was a seat of a bishop before 1000 C.E., two dummy variables accounting for the size of city in year 1300 C.E (medium or large), and the distance (km) from the nearest medieval trade center. The sample weights are applied. All specifications include regional fixed effects at NUTS-3 level. Standard errors are clustered at NUTS-3 level. The statistical significance of the test that the underlying coefficient is equal to zero is denoted by: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

elsewhere in the linear probability model (column (3)), while the probit specification (column (4)) indicates an even stronger reduction.

These results are broadly confirmed when including a dummy for municipalities located within 15 km of one of the ten largest contemporary ports.[57]

These results provide suggestive evidence that municipalities close to medieval ports—which, on average, were not more left-wing than other municipalities in the 1950s and, probably, they might have even been slightly more right-wing at the time—were less likely to have registered arrests of Jewish residents during World War II. While the exact reasons for this difference are unclear, the historical literature is rich in anecdotal evidence of the role played by local populations in Italy to help Jewish people, either by actively providing shelter or by simply not denouncing them to the Nazi-Fascists. These correlations are however consistent with the idea that, when a minority group was targeted by the government, in locations near medieval ports a more universalist cultural trait might have been reactivated, which in turn might have led to fewer arrests of the Jewish population thanks to non-cooperative behavior of the local population with the authorities. That trait remained dormant thereafter, reemerging when migration arose at the forefront of the political debate.

6 Conclusions

This study analyzes how a cultural trait rooted in the North–South Mediterranean medieval sea trade—specifically, a more universalist moral outlook—continues to influence individuals living near former medieval ports in their perceptions of migrants, political orientation, and likelihood of voting for right-wing parties. Based on historical evidence, we argue that individuals living close to medieval ports during the late Middle Age–Early Modern Period experienced earlier and greater exposure to foreigners, particularly people with radically different cultures and religions, compared to other communities. Intensive trade with non-Europeans, according to the framework of Jha (2013), might have helped develop a set of shared norms and mutual understanding with foreigners. Similarly, the presence of large slave communities in most medieval ports might have worked in the same direction, according to the framework provided by Allport's contact theory. Taken together, the cultural humus prevailing near medieval ports might have fostered some degree of tolerance or, at least, a more ingrained ability to interact with people from very different cultures, religions, or ethnicities. Our main result is that, conditional on a rich set of controls, individuals living close to a medieval port now report less negative feelings toward migrants, a lower propensity to adopt extreme right-wing views, reduced

[57] In results available from the authors upon request, we verify that our findings are not spuriously driven by localized Nazi and fascist attitudes due to resistance activity in the area. We do so by controlling for a dummy variable equal to one for municipalities awarded a medal for the heroic behavior of their population during the resistance movement against the nazi-fascists, and zero otherwise. Results are confirmed.

likelihood of voting for right-wing parties, and a more benign view of religious pluralism.

While we interpret these results in terms of an increase in the degree of universal morality close to medieval ports, in principle we cannot rule out other competing explanations. For instance, trade experience with Africa might have triggered social, institutional, and economic transformations in local communities that may have shaped how individuals currently view the role of migrants in society, independently of an increase in universal morality. However, we show that, if we control for a key indicator for the structural transformation of society, such as the degree of individuals' long-term orientation, a "residual" effect associated with living close to a medieval port is still observed. Moreover, close to medieval ports, we see only a small and imprecisely estimated reduction in the probability that individuals perceive migrants as a burden for the economy. In light of this, we believe that there is prima facie evidence that a cultural interpretation should not be discarded.

Using municipal-level data we also show that, close to medieval ports, there is a lower probability that a racist and xenophobic attack has been registered over the period 2013–2018. Interestingly, we also find that in the first national elections after the large influx of migrants (2018), right-wing parties received fewer votes in municipalities close to medieval ports. Remarkably, this is not true in a sample of previous elections that were held between the 1950s and the 2010s, when immigration was either not salient at all or, in any case, it did not have such a central stage in right-wing parties' political platforms. This suggests that the "medieval ports effect" may not be simply picking up unobservable local characteristics possibly correlated with attitudes toward migrants or propensity to vote for right-wing parties (e.g., religious beliefs or conservative/progressive cultural values), but probably a deeper cultural trait that involve either more tolerance or at least some ingrained ability to engage with foreigners, that in turn lead to experience less intense negative feelings for migrants with a different religious or cultural background. These traits may have been somewhat latent in those local areas but reactivated when migration increased and some voters experienced identity threat (demand-side) and/or when right-wing parties had started to selectively use migration in their political platforms and rhetoric (supply-side). This interpretation is indirectly supported by our finding that the probability of at least one Jewish arrest during the Holocaust was significantly lower in municipalities close to medieval ports. It is important to note that these municipalities were not, on average, less right-wing or more left-wing than elsewhere in Italy.

More generally, the results of this study suggest that prejudices toward migrants may be linked to persistent cultural traits specific to certain local areas that experienced particular political, institutional, and economic events in the past. Consequently, when a new shock occurs, such as migration or trade (Gennaioli and Tabellini 2023), it can not only polarize the electorate along cultural or social lines, but it may also create spatial divisions across the country, thus increasing even more the layers of fragmentation of society at large.

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Data Availability The survey data used in this paper are subject to restricted access and are not publicly available. Researchers may request access through the Istituto Toniolo, subject to their standard approval procedures. All remaining data and replication materials are available from the authors upon request.

Declarations

Conflict of interest The authors declare no competing interests.

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