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Ancestral Kinship and the Origins of Ideology

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Abstract

Families are not only the first institution ever created, they are also, for most people, the first institution ever encountered. The preindustrial family structure, which was a function of local ecology and cooperation needs, instilled family members with different values, such as trust in strangers and respect for elders. These values passed through generations and, as we show in three studies, impact today's political attitudes and policies. First, using surveys of second-generation immigrants representing roughly 180 ethnicities living in 32 European countries, we show that the tighter kinship structure of a person's ancestors predicts right-wing cultural attitudes. Among those who are less engaged in politics, tighter ancestral kinship structure also predicts left-wing economic attitudes. In a second study, we control for country-level differences by comparing ethnic groups within countries and find that ancestral kinship strength predicts right-wing cultural attitudes but not left-wing economic attitudes. Finally, in a third study, we examine the policy implications of ancestral kinship. We show that stronger country-level ancestral kinship strength also increases anti-LGBT policies and welfare spending. Finally, we examine whether value systems link preindustrial kinship with modern political attitudes. In total, this work indicates that our political beliefs are rooted in the value systems and familial institutions created by our forebears.

Keywords: Belief systems; kinship; family ties; ideology

Scholars have long believed that political beliefs are, in part, rooted in psychological predispositions such as personality traits and value systems (Aarøe, Petersen, and Arceneaux 2017; Clifford and Jerit 2018; Federico and Malka 2018; Hetherington and Suhay 2011; Johnston, Lavine, and Federico 2017; Kam and Estes 2016). Although there is generally broad agreement that these psychological predispositions affect political attitudes, researchers have not clearly examined the origins of these value systems and subsequent political beliefs.

In this paper, we argue that one source of variation is the structure of the family, which itself is rooted in the need for cooperation and the environment in which our ancestors lived. With a few important exceptions (Putnam 1993; Robinson and Gottlieb 2021), political scientists have generally ignored the impact of family structure. Instead, examining the impact of family structure has been left to sociologists, psychologists, and economists. This is a fairly glaring oversight, as institutions are at the heart of political science, and families are the 'most primitive institution' (Alesina and Giuliano 2014) in society. The family's strictures on marriage, descent, and values likely have a more significant impact on our daily lives than any governmental institution. Economists and anthropologists, on the other hand, have examined the link between family structure and various political outcomes, such as GDP (Alesina and Giuliano 2014), corruption (Akbari, Bahrami-Rad, and Kimbrough 2019), and political institutions (Todd 1985). While illuminating, that literature is limited, as it is mostly divorced from the political science literature on the structure and origins of political beliefs.

Although political scientists have long believed that political beliefs are transmitted through families (Jennings and Niemi 1968) and that stricter child-rearing preferences are tied to political

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attitudes (Adorno et al. 1950; Fraley et al. 2012), child-rearing preferences and family structure are distinct constructs. Authoritarianism is an attitudinal measure, potentially influenced by political beliefs (Bakker, Lelkes, and Malka 2021; Egan 2020), and is potentially downstream from family structure. Ancestral kinship strength is a structural measure that focuses on a person's ancestors' marriage and lineage rules. For instance, is a child supposed to marry within the extended family?

In this paper, we link recent work in economics (Enke 2019) and anthropology (Henrich 2020; Schulz et al. 2019) with recent literature in political science (Federico and Malka 2018; Johnston, Lavine, and Federico 2017; Malka, Lelkes, and Soto 2019). We show that the strength of ancestral family ties, an important dimension of family structure, reliably predicts political attitudes and policies. First, we combine survey responses from second-generation immigrants in more than thirty European countries with historical ethnographic information on family structure. We show that stronger ancestral family ties reliably predict right-wing cultural attitudes and, among some people, left-wing economic attitudes. In line with recent research that finds that elites structure economic attitudes among those who feel drawn to right-wing cultural policies and are politically engaged (Johnston, Lavine, and Federico 2017; Malka et al. 2014), the relationship between ancestral kinship strength and economic attitudes is dependent on political awareness. To ameliorate concerns that any differences are due to country-level confounds, in a second study we move past country-level ancestral kinship scores and, using a large cross-national dataset, leverage variation across respondents within the same country but from different ethnic groups, the results of which show that kinship tightness still predicts right-wing cultural attitudes. However, we do not find any relationship with economic attitudes, regardless of a person's level of political engagement. Next, we examine whether kinship strength affects public policy. In line with Studies 1 and 2, policies in countries rooted in strong kinship ties are more culturally conservative and, in line with Study 1, economically progressive.

In summary, this research helps us to understand the origins and cross-cultural differences in political ideology. Incorporating family structure into ideology research helps explain why left-wing economic attitudes typically go with right-wing cultural attitudes around the world (Caughey, O'Grady, and Warshaw 2019; Malka, Lelkes, and Soto 2019). It also explains the origins and cross-cultural variation in needs for security and certainty, an obvious gap in the extant literature that some believe lays the psychological foundation for political ideology (Federico and Malka 2018). Finally, these results indicate that political science should look towards cultural evolution, or how the environment shapes cultural traits and even genetics, which are then transmitted through generations (Creanza, Kolodny, and Feldman 2017), to help explain the patterns of politics we see today.

The Political Psychology of Belief Systems

Political scientists generally argue that there are at least two dimensions of political beliefs in mass publics around the world (Malka, Lelkes, and Soto 2019): One related to economic policies and preferences and one related to cultural policies and preferences. These dimensions tend to be weakly correlated in most countries (Malka, Lelkes, and Soto 2019), and political psychologists have argued that the psychological determinants of these preferences vary by dimension (Feldman and Johnston 2014). In particular, researchers point to a constellation of personality traits and values sometimes referred to as open-versus-closed predispositions. Those with a closed predisposition 'prioritize order, certainty, and security in their lives. As a result, they value tradition, self-discipline, group cohesion, and respect for authority, and they tend to have conventional cultural tastes in things like music, food, and art' (Johnston, Lavine, and Federico 2017). Consequently, those who are more likely to possess a closed set of predispositions also tend to oppose policies that disrupt social norms and social harmony (Adorno et al. 1950; Duckitt 2015). Therefore, these individuals tend to support right-wing cultural policies that reinforce traditional gender roles and social hierarchies (Hetherington and Weiler 2009; Johnston, Lavine, and Federico 2017; Stenner 2005).

Disgust sensitivity is another psychological predisposition that some believe governs political beliefs, particularly cultural beliefs. Disgust sensitivity creates ‘hypervigil[ance] against anything and everyone that appears unfamiliar’ (Aarøe, Petersen, and Arceneaux 2017, 280). This hypervigilance against the unfamiliar manifests itself in present-day right-wing attitudes on several cultural war issues (Kam and Estes 2016), including attitudes towards, for instance, gay marriage, immigration, and abortion. Kam and Estes (2016) theorize that the latter relationship between disgust and abortion is due to graphic depictions of abortion published by the pro-life movement.

Although researchers have consistently found a relationship between disgust sensitivity and closed values on the one hand and attitudes on the cultural policy dimension on the other, the relationship between values and economic preferences is contingent on political engagement. Recent research has found that, among those less politically engaged, the various indicators of the closed value system are consistently related to left-wing economic attitudes (Johnston, Lavine, and Federico 2017; Malka et al. 2014; Ollershaw and Johnston 2022). As the social safety nets provided by left-wing policies satisfy the needs for certainty and security, some have argued that there is an organic relationship between left-wing economic attitudes and the closed value system (Braithwaite 2009; Malka et al. 2014). However, according to the ‘reversal hypothesis’ (Johnston, Lavine, and Federico 2017; Malka et al. 2014), citizens are initially attracted to right-wing parties for the cultural policies they espouse, as they are ‘easier’ to align with their value system (Johnston and Wronski 2015). Those who pay attention to politics then learn ‘what goes with what’ (Converse 1964). Since right-wing economic policies tend to go with right-wing cultural policies among political elites, particularly in Western democracies, engaged citizens with a closed-value system tend to also hold right-wing cultural policies.

While we know about the psychological traits that purportedly govern these policy positions, we know far less about why people hold these predispositions in the first place. Recent literature suggests one answer lies in the structure of the family.

Family Ties and the Cultural Evolution of Value Systems

Families ‘represent the first institution we encounter upon arriving in the world and, in most societies until recently, have provided the central organizational framework for most people’s lives’ (Henrich 2020). Family structure varies on several dimensions, including who kin are allowed to marry, geographic distance to extended family, rules determining lineage descent, and fictive kinship, but family tie strength is an overarching dimension that is believed to be particularly important (Enke 2019; Henrich 2020; Schulz et al. 2019). Weak family ties are generally defined as nuclear family arrangements where children leave their parent’s household, typically around marriage, which is exogamous. Strong family ties are generally defined as clan-based organizations where extended families live together, and marriage is endogamous (Henrich 2020). The strength of kinship ties is also ‘sticky’: Alesina and Giuliano (2014) show that family structures from the Middle Ages are strongly correlated with family structures today.

Tight versus weak kinship ties predict important societal outcomes. Researchers since Weber (1904) have argued that strong family values inhibit economic and social development, since strong family ties prevent people from ‘act[ing] together for their common good, or, indeed, for any end transcending the immediate, material interest of the nuclear family’ (Banfield 1958). More recently, Fukuyama (1995) and Putnam (1993) both argue that strong family ties hindered the development of formal legal and political institutions, which are based on generalized social trust. In countries where strong family ties are the norm, selfish behaviour outside the family is acceptable. Selfish behaviour is a significant obstacle to the development of social trust, which results in lower GDP and greater corruption (Akbari, Bahrami-Rad, and Kimbrough 2019; Alesina and Giuliano 2014).

Recent research has shown that family ties are fundamental determinants of value systems (Enke 2019; Schulz et al. 2019). In particular, strong family ties predict more conformity and less individualism. For example, compared to those who live in countries with weaker kinship

ties, people living in countries with tighter kinship ties report that they feel constrained by social norms (Gelfand et al. 2011). Furthermore, in a set of lab-in-the-field experiments, those living in countries with stronger kinship ties are more likely to conform to their peers' incorrect decisions (Henrich 2020). Those from ethnic groups that historically have stronger kinship ties tend to have high levels of ingroup trust and outgroup distrust, value traditions and customs, and raise their children to be obedient. Finally, they also tend to display higher levels of disgust sensitivity (Enke 2019; Henrich 2020).

Researchers argue that the strength of kinship ties and subsequent value systems vary for at least two reasons: Modes of subsistence and pathogen threat. Regarding subsistence, researchers have argued that 'more advanced production modes in agriculture and animal husbandry are believed to be characterized by stronger kinship ties. The reason is that sedentary agriculture or tending animals require medium-scale cooperation for the purpose of, say, harvesting crops under time pressure, building irrigation systems, or defending territory' (Enke 2019; see Gowdy and Krall 2015 for a review). Ang and Fredriksson (2017) find that areas that are suitable for growing wheat, which has a relatively short growing season and is less intensive than other crops, predict weaker family ties. Men in these societies tend cattle and live semi-nomadic lives away from the women, who stayed home to tend the crop. This mobility increased communication and trade with other tribes, which weakened family ties and, presumably, increased outgroup trust.

Enke (2019) finds a strong negative correlation between the historical reliance of an ethnic group on hunting and gathering and the strength of kinship ties. Societies that rely on hunting and gathering tend to revolve around the nuclear family, which is more mobile than more intensive family structures. Groups that rely more on hunting and gathering also develop more extensive (but not intensive) networks. When disasters strike or hunters are unlucky, these groups depend on others for help; being able to call on, for instance, co-religionists is essential. Whereas the geographic range of close-knit groups tends to be fairly limited, 'the norms of mobile hunter-gatherer societies allow – even compel – individuals and families to weave extensive, far-flung kin networks that stretch out for tens or hundreds of miles' (Henrich 2020).

The need to rely on non-kin for cooperation led to the evolution of 'universal values' such as impartiality, fairness, and individual rights (Enke 2019), which allow people to trust strangers. It also gave birth to moralizing gods 'who sanction violators of interpersonal social norms, foster and sustain the expansion of cooperation, trust and fairness towards co-religionist strangers' (Purzycki et al. 2016). Groups more dependent on agriculture developed more particularistic or communal values that favoured in-group members, such as respect for elders, obedience, and in-group loyalty, to enforce cooperation and deter shirking (Enke 2019; Henrich 2020).

A second purported cause of kinship strength is the pathogen threat. Enke (2019) finds that groups with tighter ancestral kinship often come from areas particularly suitable for malaria and the disease-carrying tsetse fly. Groups from these areas form tight kinship networks to reduce the need to travel across pathogen-laden areas for trade. They also instil disgust sensitivity in their offspring to avoid disease-causing organisms, including unfamiliar outsiders.

Groups maintain these norms and value systems through cultural rituals, religious beliefs, and family/marriage practices. For instance, by enforcing endogamous marriage and certain lineage practices, family members remain duty-bound to the group. Groups that implement exogamous marriage and do not maintain strict lineage practices ensure that norms related to family loyalty remain weak, as family members are free to move away from home and associate with non-kin. Schulz et al. (2019) maintain that the Catholic Church explicitly banned cousin marriage to weaken the power of clans relative to the Church.

Importantly, the norms and values sustained by the tight-knit family structure are as similar to those identified by political psychologists as those underpinning political ideology. For instance, in-group loyalty, obedience, and deference to elders, which are correlated with intensive kinship ties, are virtually synonymous with authoritarianism, which Stenner (2005) describes as a motivation to 'be part of some collective, not from identification with a particular group ... not in

commitment to a specific normative order'. Similarly, Enke's measure of kinship strength is strongly correlated with Hofstede's measure of individualism, which itself is similar to and strongly correlated with Schwartz's (1994, 2010) openness versus conservation value dimension. Furthermore, a closed value system, cultural political attitudes, and strong kinship ties share at least one antecedent: Pathogen risk. Hence, we hypothesize that kinship structure gives rise to the particular set of values that underpin political ideology.

While a few studies have examined the relationship between family structure and political beliefs, these studies have critical limitations. Using World Values Survey data, Alesina and Giuliano (2014) found that the degree to which survey respondents felt the family is important is related to right-wing gender attitudes and right-wing redistributive attitudes. However, this work does not measure actual family structure, and self-reported family values may be endogenous to political attitudes. Todd (1985) relates the dominant kinship structure in a country to its system of government. In addition to examining systems of government rather than attitudes, endogeneity also poses serious threats to his framework. For instance, governments with generous pension systems may allow for a looser kinship structure as family members become less reliant on one another. The work also predates or ignores the literature on psychological roots of ideology, which, we argue, is vital in linking family structure to political beliefs. While authoritarianism and other indicators of the closed-value system are consistently related to right-wing cultural attitudes, these traits are inconsistently associated with economic attitudes.

Hence, based on the literature on kinship structure and the literature on values and ideology, we predict that a tighter kinship structure will predict right-wing cultural attitudes (H1) and left-wing economic attitudes (H2). In comparison, a looser kinship structure will predict left-wing cultural attitudes and right-wing economic attitudes.

Building on the work of Malka et al. (2014) and Johnston, Lavine, and Federico (2017), we expect the relationship between kinship strength and economic attitudes will depend on the degree to which respondents are politically engaged (H3). Respondents who come from more intensive kinship networks, but are less politically engaged, will not know that right-wing cultural policy preferences typically go with right-wing economic policy preferences. Instead, these respondents will 'follow their values' and hold left-wing economic policy preferences. Respondents from more intensive kinship networks who are more politically engaged will maintain more right-wing economic policy preferences.

One criticism of this line of research could be that ancestral kinship is just a synonym for an authoritarian upbringing, which has long been known to predict right-wing cultural attitudes. The present work argues that ancestral kinship is likely a root of authoritarianism and other traits closely linked to a 'closed' personality. That is, while we know that having strict child-rearing preferences predicts right-wing attitudes, we do not know where these preferences come from.

Even so, these are two distinct constructs. The canonical measure of authoritarianism is an attitudinal measure that asks respondents to rank traits they value in children (for example, independence vs. respect for elders, obedience vs. self-reliance). On the other hand, ancestral kinship strength is a structural measure that indicates a person's social group practices (for example, endogamy). Furthermore, authoritarian attitudes and right-wing policy preferences are almost always measured at the same time, and there are reasons to suspect that authoritarian attitudes are endogenous to political preferences (Bakker, Lelkes, and Malka 2021; Egan 2020). While ancestral kinship may be a root factor of authoritarianism, they are discrete concepts, with authoritarianism being influenced by a host of other distal and proximal factors divorced from kinship. In the appendix, we explore whether authoritarianism or other sets of values and attitudes, including openness to change and conservation, may account for the relationships we find.

Past literature that examines the role of kinship strength in politics has generally operationalized family strength as self-reports on the importance of family (Alesina and Giuliano 2014) or contemporary family structure (Todd 1985). As attitudes may affect the family structure – for example, right-wing cultural beliefs may affect child-rearing practices – more recent research

has examined the effects of ancestral kinship strength on contemporary attitudes using data from the Ethnographic Atlas (EA), a dataset first compiled by Murdock (1967) and later updated by Giuliano and Nunn (2017). The EA – one of the largest and the most heavily used ethnographic databases – records information about the organizational structure of 1,311 ethnic groups based on ethnographies written throughout modern human history. The average year of observation in the EA is 1900, and all records, even those from the twentieth century, come before industrialization and sustained European contact. The earliest ethnographic data is from African, European, and Asian cultures where written evidence is available. Information from groups without a written history comes from the earliest evidence of these cultures, some of which are as late as the twentieth century (Giuliano and Nunn 2017).

In all three studies described below, we use an index of kinship strength created by Enke (2019), which is based on data from the EA. Kinship tightness is composed of an unweighted average of four binary variables that indicate whether: (1) the domestic organization of an ethnic group consists of an independent nuclear family (coded 0) or extended polygynous or polyandrous families (coded 1); (2) the post-marital residence consists of the wife going to the husband's group or the husband to wife's group (coded 1) or whether the couple moves to either group or a new location (coded 0); (3) both the wife and husband's side of the family are equally important when determining the transfer of property/wealth (coded 0) or whether a lineage follows a patrilineal, matrilineal, or other particular descent rules (coded 1); and (4) communities are organized around clans (coded 1) or whether people marry outside of the clan (coded 0).

Figure 1 plots the distribution of kinship strength across the world from the EA. Each dot represents the approximate location of that ethnic group when entered in the EA. By way of example, many of the countries with low kinship tightness scores are countries from Western Europe, including Luxembourg, Switzerland, Sweden, Denmark, Norway, and Germany. Weak kinship ties within these European countries – which are often characterized as 'Western, Educated, Industrialized, Rich, and Democratic' (WEIRD) – are well-documented and may be the result of the Western church transforming European kinship structures during the Middle Ages. At the other end of the kinship spectrum are either countries with a long history of being a collectivist society or are small island countries. For example, in the EA data, both Rwanda and Somalia, which are known for being very conservative and close-knit (Abdile 2012), have a high kinship tightness scores. Further, small island countries that, prior to industrialization, contained a single ethnic group, such as the Netherlands Antilles, Aruba, and the Bahamas, also have high kinship tightness scores in the EA data.¹

To disentangle the effect of culture from other factors that might influence beliefs, the best practice is to examine the relationship between ancestral kinship and attitudes of second-generation immigrants as this allows us to disentangle the respondents' current location from their ancestors' location (Enke 2019; Schulz et al. 2019). Any influence of kinship structure on attitudes now flows solely through cultural transmission and not other confounds, such as formal education, local ecology, or other institutions. Throughout these studies, we replicate the models of other recent studies in this area (Enke 2019; Schulz et al. 2019) and control for the degree to which a person's ethnic group has historically depended on hunter-gathering versus agriculture and the year in which ethnic group information was collected.

Study 1: The Effect of Ancestral Kinship Strength on Political Beliefs

In the first study, we test the various hypotheses by combining cross-national survey data with data from the Ethnographic Atlas.

¹The ethnic groups in the present-day United States represent the indigenous peoples of the Americas.

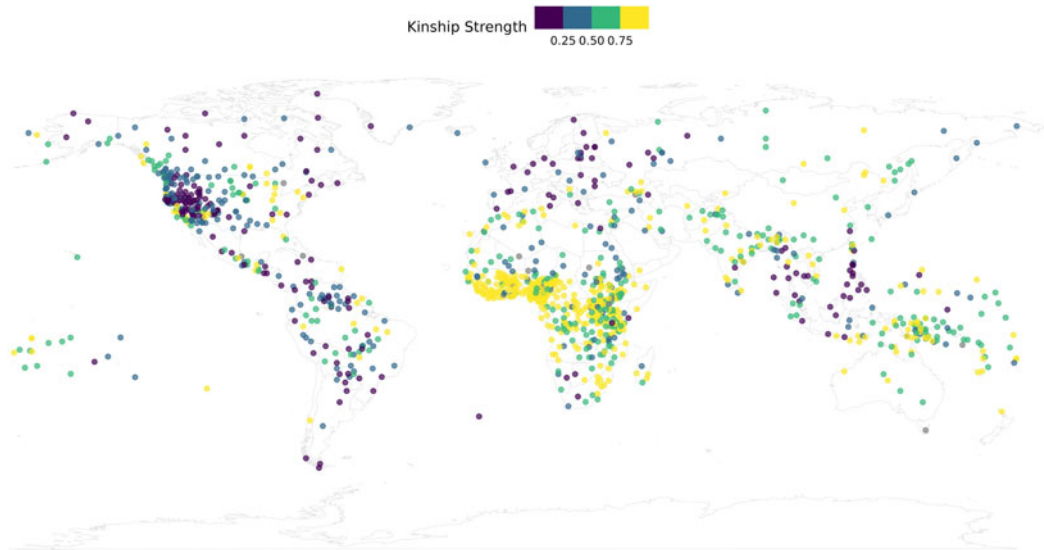


Figure 1. Ethnic Groups and Kinship Tie Strength in the Ethnographic Atlas. Purple indicates weak kinship ties/Yellow indicated strong kinship ties.

Cross-National Survey Data

We use data from the European Social Survey (ESS), which was conducted in thirty-three countries between 2002 and 2018. The ESS contains survey responses from roughly 30,000 second-generation immigrants. The sample size varied across models, as not all questions were asked in all waves (See Appendix 2.1 for question-wording), which is why we also do not combine batteries into a collapsed measure. For sample size by country, see Table A1.

Ancestral Kinship Strength

The ESS asked respondents to list their father and mother's countries of origin. Over 180 countries of origin are represented in the dataset. We then matched country-level kinship tightness scores to country-of-origin for each parent. For simplicity of presentation, in the main text, we present results based on the father's ethnicity and include the results based on the mother's ethnicity in the appendix as the results are almost identical (See Appendix 2.3). We use Enke's estimation of country-level ancestral kinship, which takes the average of two different methods of calculating these scores. First, it uses population shares of each ethnicity within each country, which entails 'averaging kinship tightness across all ethnic groups in the EA that reside within (contemporary) country borders and then matching these historical averages to contemporary populations' (p. 978), a technique developed by Putterman and Weil (2010). A second method involves matching the ethnic groups' languages in the EA to the proportion of the contemporary country that speaks those languages. For instance, if 60 per cent of the population in Belgium speaks Dutch (or Flemish) and 40 per cent speak French (or Walloon), the country average is a weighted average of the ethnic groups in the EA whose language groups are closest to French and Dutch. The average score using both approaches is used. We then rescale the index to lie between 0 and 1. The distribution of kinship scores appears in Fig. 2. The mean kinship strength was 0.29 (s.d. = .26). On average, each country in the ESS is home to fifty-seven different countries of origin for second-generation immigrants. The full range of kinship scores appears, or is very close to it, in every country present in the ESS. Great Britain, for instance, has second-generation immigrants from 115 countries with very low kinship strength scores, for example, Switzerland (Kinship

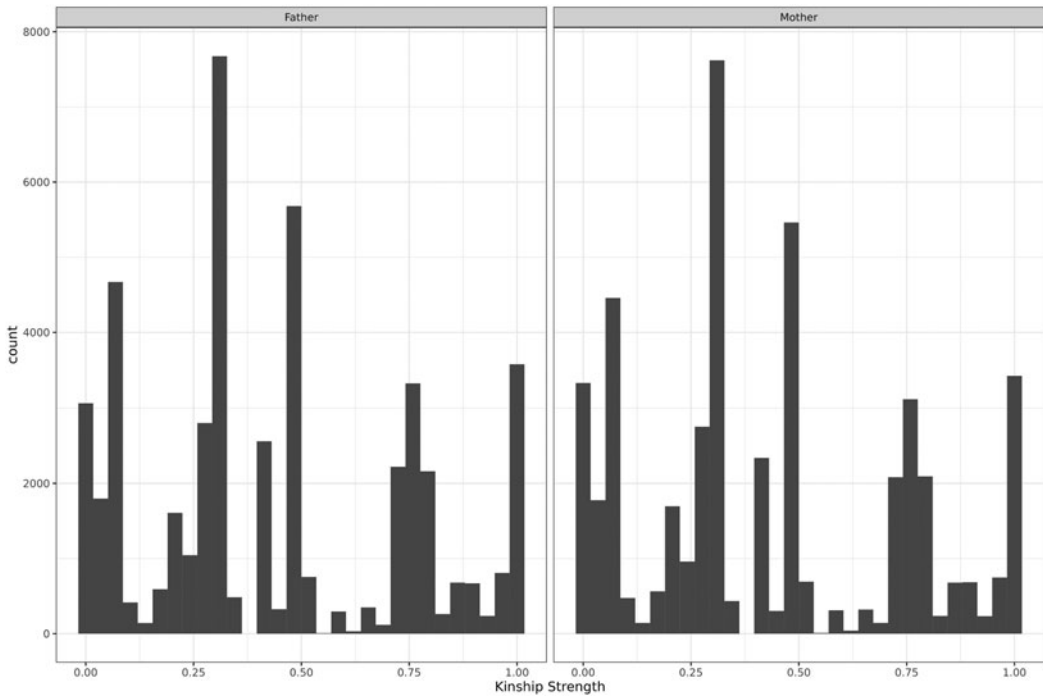


Figure 2. Distribution of Kinship Scores in the ESS, based on the mother's (right) and the father's (left) country of origin.

Score = 0), as well as countries with very high kinship strength scores, for example, Rwanda (Kinship Score = 1). Turkey, on the other hand, has second-generation immigrants from eight countries, including those with low kinship scores, for example, Romania (Kinship Score = 0.07), as well as high kinship scores, for example, Bosnia and Herzegovina (Kinship Score = 0.99).

Attitudes on the Cultural Dimension

We used two measures that, based on past research, fall on the cultural dimension of political attitudes. All variables are coded to lie between 0 and 1, where 0 indicates the most left-wing position and 1 indicates the most right-wing position. First, did the respondent agree with the statement that 'Gay men and lesbians should be free to live their own life as they wish'? ($m = 0.31$, $s.d. = 0.30$. Asked in all waves) Second, did the respondent agree with the statement that 'When jobs are scarce, men should have more right to a job than women'? ($m = 0.33$, $s.d. = 0.31$. Asked in 2 waves). We keep items separate as the gender attitudes question is asked in only a subset of waves.

Attitudes on the Economic Dimension

We use three sets of measures that relate to the scope of government responsibility. Again, all variables are coded to lie between 0 and 1, where 0 indicates the most left-wing position and 1 indicates the most right-wing position. First, we use a four-item battery asking whether they support 'social benefits and services' in their country (median within-country $\alpha = 0.71$, $m = 0.49$, $s.d. = 0.21$. Asked in two waves). Second, we use a three-item battery asking whether the government has a responsibility to ensure a reasonable standard of living for the old, a reasonable standard of living for the unemployed and childcare for working parents (median within-country $\alpha = 0.67$, $m = 0.22$, $s.d. = 0.16$. Asked in two waves). Finally, we use a single-item measure asking

whether the government should take measures to reduce differences in income levels (median within-country mean = 0.26, s.d. = 0.07. Asked in all waves).

Political Engagement

Political engagement consisted of a composite of seven items (median within-country $\alpha = 0.60$, mean = 0.21, s.d. = 0.18) that are frequently used to measure political engagement (Abramowitz 2010; for example, did the respondent work for a political party or action group in the last twelve months?). This battery was coded to lie between 0 and 1, with 1 indicating the most politically engaged.

One concern is that political engagement is endogenous to kinship, which would introduce post-treatment bias into these results. This concern, while certainly valid, applies to any research that examines the relationship between some psychological variable and political engagement (Johnston, Lavine, and Federico 2017; Malka, Lelkes, and Soto 2019; Stenner 2005). Somewhat reassuringly, the correlation between kinship and political engagement is weak ($r = -0.05$).

Analytical Approach

Each model regresses each attitudinal measure of kinship. We also include country of residence fixed effects, so that only individuals living within the same country are compared, as well as survey wave fixed effects. This ameliorates concerns that survey items function differently in different countries/times. In the first specification, we include only year and country of residence fixed effects. In the second specification, we sought to minimize researcher degrees of freedom by using the same set of controls used by Enke (2019) and Schulz et al. (2019), which include basic demographics (gender, age) that are exogenous to both attitudes and kinship, and two ethnic group level controls (the year [logged] that ethnic group information was entered in the Ethnographic Atlas and historical reliance on hunting and gathering). The first ethnic group-level control was included to account for the possibility that kinship strength is a function of year (although the two are only weakly correlated in the ESS data). The second ethnic group-level control was included because subsistence practices are purportedly a cause of kinship strength (Enke 2019). We also included two other ethnic group-level controls that are also antecedents of kinship strength – historical reliance on agriculture (another measure of subsistence, taken from the Ethnographic Atlas) and local malarial risk (taken from Enke's data). In a third specification, we included demographic information potentially affected by kinship, which may yield more biased estimates, including R's religious denomination and education. Religious denomination is particularly problematic as Enke (2019) argues that kinship strength affects the formation of moralistic gods. We also include the country's percentage of the population that was Catholic in 1900, the percentage of the population that was Muslim in 1900, the level of urbanization in 1900, and the population density in 1900. Because kinship purportedly affects trust, which may impact development, we consider this specification to be the most problematic. To test whether political engagement moderates the relationship between kinship and economic attitudes, we add an interaction term between engagement and kinship using the same set of variables as the second specification. In all specifications, standard errors are clustered at the ethnic group level because variation of kinship strength occurs by ethnicity.

Results

In line with the first hypothesis, more intensive kinship ties predict more conservative attitudes on cultural attitudes (Panel A, Fig. 3). First, more intensive kinship predicts more conservative Gay Rights attitudes (left panel). The main specification (Specification 2) indicates that moving from the least intensive kinship strength to the most intensive kinship strength increases right-wing

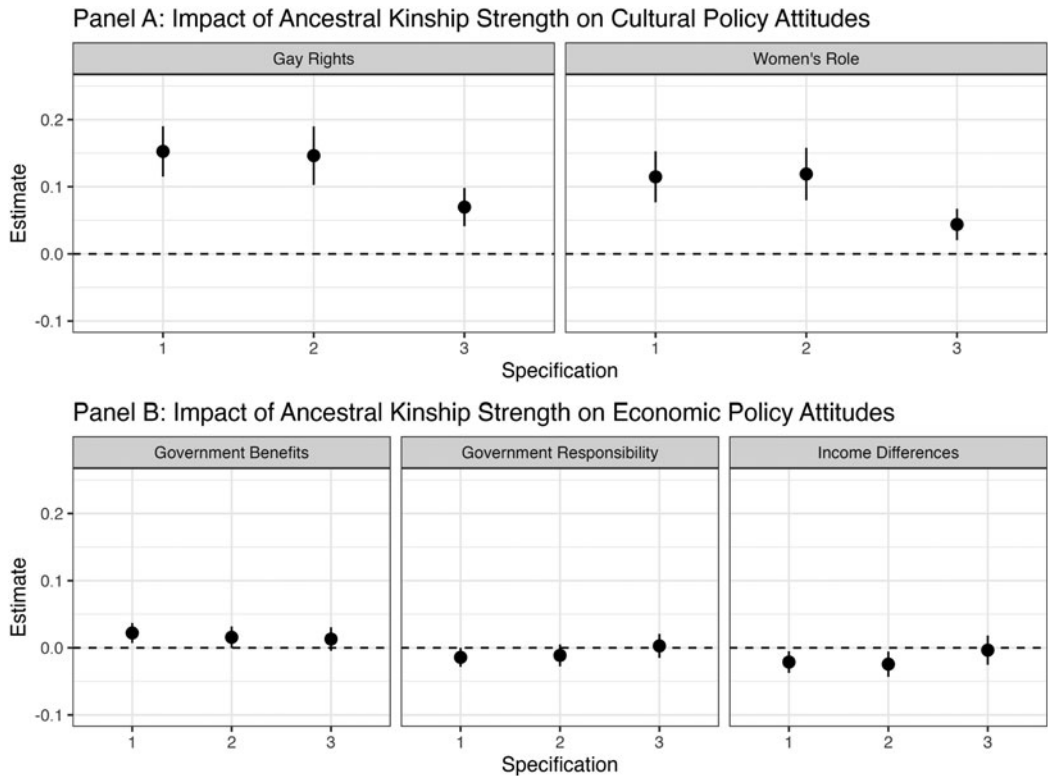


Figure 3. Study 1: Effects of Ancestral Kinship Strength on Policy Attitudes, ESS Data. Specification 1 includes country and year and census region fixed effects. Specification 2 adds exogenous demographic covariates and ethnic group-level controls. Specification 3 adds R's religious denomination and education level. Error bars are 95 per cent confidence intervals.

Gay Rights attitudes by about 0.15 points (s.e. = 0.02 [on a 0–1 scale]) in the first two specifications. Including potential post-treatment controls (Specification 3) shrinks these estimates by roughly a third but the results remain strong and statistically significant ($\beta = 0.07$, s.e. = 0.01). In the main specification, the relationship between ancestral kinship and Gay Rights attitudes is four times the size of the difference in male and female gay rights attitudes (men tend to be more homophobic; Woodford et al. 2012) and roughly the same size as the difference in Gay Rights attitudes between the oldest and youngest respondents in the sample.

Kinship strength had similarly sized effects on gender attitudes (right panel). In the main specification (Specification 2), moving from lowest to highest kinship strength predicts a roughly 0.12 point (s.e. = 0.02 [on a 0–1 scale]) increase in right-wing gender attitudes. Including potentially problematic controls, Specification 3 shrinks these coefficients by a third ($\beta = 0.04$, s.e. = 0.01) but the relationship is still substantively strong and statistically significant. The relationship in the main specification is large – the effect size is approximately twice the difference in gender attitudes between male and female respondents and two-thirds the size of the difference in gender attitudes between the oldest and youngest respondents in the sample.

Contrary to our second hypothesis, kinship intensity does not consistently significantly predict left-wing economic attitudes (Fig. 3, Panel B). Across specifications, kinship intensity coefficients neither predict left-wing nor right-wing beliefs that the government should provide benefits (left panel). Likewise, no significant relationship was found between kinship strength and attitudes about the government's responsibilities (middle facet). However, the relationship between kinship strength and right-wing attitudes about reducing income differences (left panel) was negative. For

the main specification, moving from weakest to strongest kinship strength decreased right-wing attitudes on reducing income differences by -0.01 (s.e. = 0.01, $p = 0.01$). The effect became insignificant in the third. For complete results, see Tables A2–A11.

We include a discussion of the sensitivity of these results to omitted variable bias in Appendix 2.4.

Does political engagement moderate the impact of kinship score on economic attitudes?

Consistent with the engagement hypothesis (H3), kinship strength yields more left-wing economic attitudes among those who are the least politically engaged while yielding more right-wing economic attitudes among those who are the most politically engaged.² Figure 4 displays the fitted values for regressions for each economic attitudes measure (government benefits [row 1], government responsibility [row 2], and income differences [row 3]) based on the interaction between political engagement and the mother's ancestral kinship score (left columns). The distribution of the political engagement measure appears along the x -axis of each figure.

For instance, among the least politically engaged, kinship strength decreased right-wing attitudes on government responsibility (Panel B) and income differences (Panel C) questions by about 0.03. Note that the political engagement is positively skewed and that most people are politically unengaged. Among the most politically engaged, kinship strength increased right-wing attitudes on the government responsibility and government benefits questions by roughly 0.04. Kinship strength did not decrease right-wing attitudes on the government benefits battery among those with the lowest levels of political activism but did increase right-wing attitudes on this battery among those with the highest levels of political activism.

The interaction effects between political engagement and kinship score were significant in the first and second cases but not the third. The interaction effects were $\beta = 0.07$ (s.e. = 0.04, $p = 0.03$), $\beta = 0.07$ (s.e. = 0.03, $p < 0.02$), $\beta = 0.04$ (s.e. = 0.03, $p = 0.06$) for government benefits, government responsibility, and income differences, respectively. For results in tabular form, see Table A12.

Study 2: Leveraging Within-Country Kinship Strength

Ancestral kinship strength seems to be linked to political attitudes. Nonetheless, the previous study utilized country-level ancestral kinship scores. This created several issues: The studies assumed that respondents nested within a country – or, more specifically, those whose parents are nested within a particular country – have identical kinship scores, regardless of their ethnic background. However, as countries often have several, if not many, different ethnic groups within their borders, our data may be overly coarse as ethnic groups transcend international borders. Second, and perhaps more importantly, we cannot separate the impact of ancestral kinship scores from other country-level differences. Third, it is possible that people who leave their country of origin are different in some way from the people that remain. For instance, they may be less traditional than those who remain, thereby understating our results. In the second analysis, we compare people with different kinship scores within the same country of origin, thereby controlling for country-of-origin differences.

Data and Methods

We use data from the World Values Survey (WVS),³ which has been conducted since 1981 and used to track changing attitudes and values of individuals across over ninety countries. The WVS not only contains similar questions to the ESS regarding cultural and economic attitudes and political engagement but also includes the ethnic group of each respondent.

²We regress each outcome measure on kinship score, the covariates used in Specification 2 in the models above, the interaction between kinship score and political engagement (the parameter of interest), and the interaction between political engagement and all other covariates.

³<https://www.worldvaluessurvey.org/>

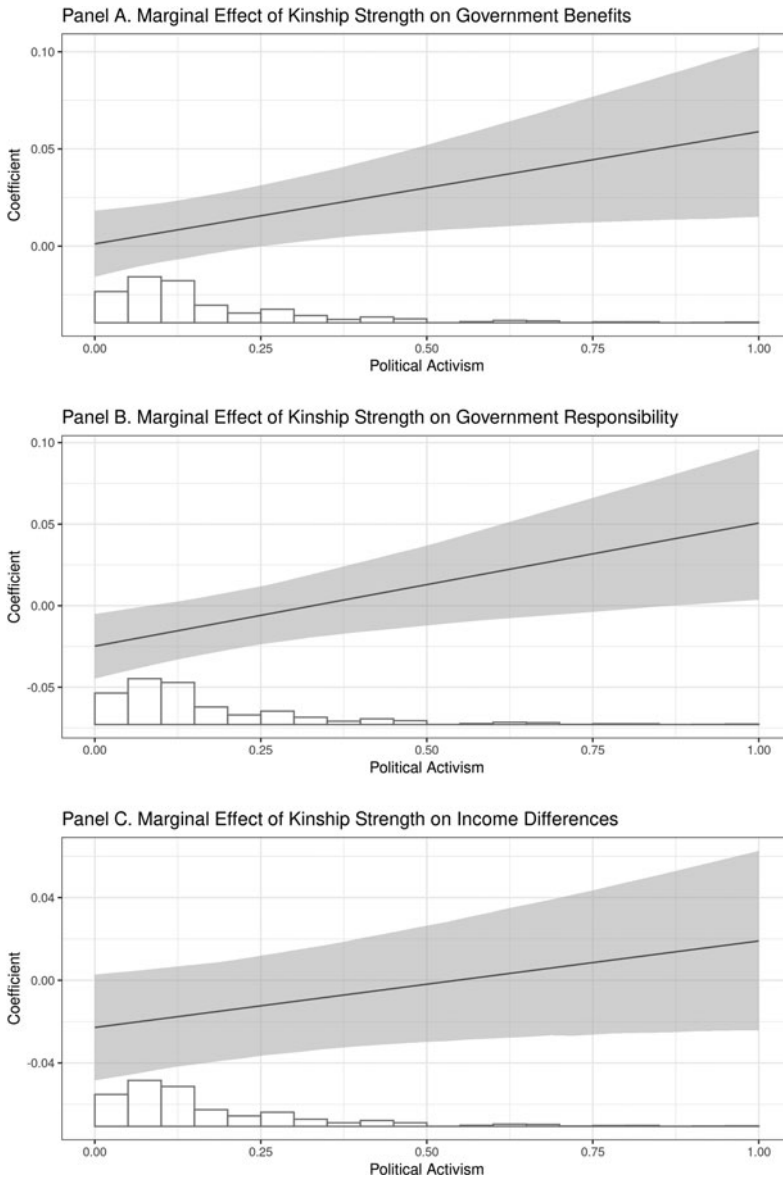


Figure 4. Study 1: Does political engagement moderate the impact of kinship on economic attitudes?

Ethnicity-Level Kinship Scores

Individuals in the WVS were matched to their ethnic group in the EA and were subsequently assigned their ancestral kinship tightness score by ethnic group. We were able to match 103 ethnicities across 30 countries, giving us a sample size of 48,487. For the sample size and ethnic groups per country, see Appendix 3.3. The distribution of ancestral kinship scores appear in Figure 5.

Attitudes on the Cultural Dimension

Two items were used to form a measure of cultural attitudes. Respondents were asked to what extent homosexuality and abortion are justifiable on a scale from 1 ('never') to 10 ('always'). Both items were rescaled to fall between 0 and 1, with 0 indicating the most left-wing position

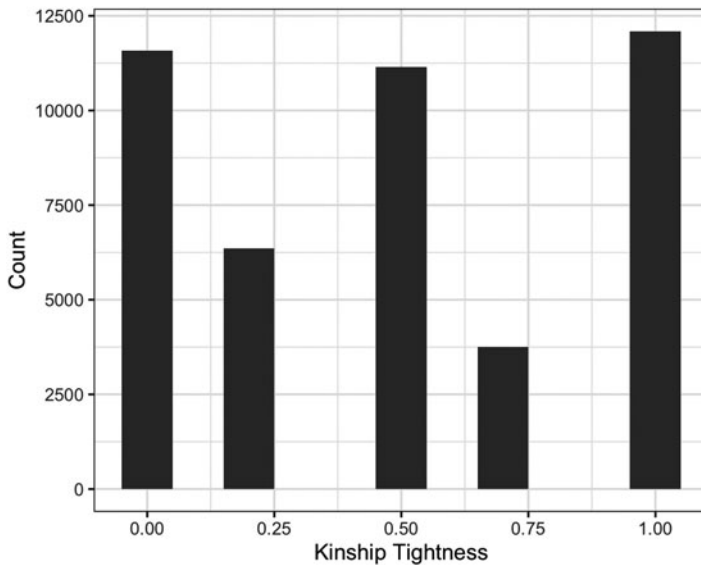


Figure 5. Distribution of kinship scores from EA matched with WVS data.

and 1 indicating the most right-wing position, and were then collapsed to form a single measure of cultural attitudes ($\alpha = 0.62$, $m = 0.82$, $s.d. = 0.23$). For all specific item wording, see Appendix 3.2.

Attitudes on the Economic Dimension

Two items were used to form a single measure for economic attitudes. The first question was about income inequality, which asked respondents to place themselves on a 10-point scale from 1 ('incomes should be made more equal') to 10 ('there should be greater incentives for individual effort'). The second question was about government responsibility and asked respondents to place themselves on a 10-point scale from 1 ('individuals should take more responsibility for providing for themselves') to 10 ('the state should take more responsibility to ensure that everyone is provided for'). These two items were rescaled to fall between 0 and 1 and were averaged together to form a single measure of economic attitudes ($\alpha = 0.36$, $m = 0.48$, $s.d. = 0.26$).

Political Engagement

Two items were used and collapsed to form a single measure of political engagement. The first item asked the respondents how important politics is in their life from 1 ('very important') to 4 ('not at all important'). The second question asked the respondents how interested they are in politics from 1 ('very interested') to 4 ('not at all interested'). These two items were averaged together to form a single measure of political engagement ($\alpha = 0.68$, $m = 0.46$, $s.d. = 0.28$). As in Study 1, the correlation between kinship and political engagement is weak ($r = -0.02$).

Analytical Approach

Each model regresses one of the two attitudinal measures of kinship. All models include country of residence and wave fixed effects, and the Standard Errors (SEs) are clustered by ethnic group. Our modelling strategy largely mirrors that of Study 1 (and that of Enke [2019] and Schulz et al. [2019]). Country of residence fixed effects allow us to compare the relationship between ethnic groups with different kinship scores within a country, thereby controlling country-level confounders. For both attitudinal measures, the first specification is simply regressing the attitude on kinship. The second specification adds individual-level controls (age and gender) and ethnic group-level controls; that is, the year that the ethnic group was entered into the Ethnographic

Atlas, the historical reliance on hunting and gathering, the historical reliance on agriculture, and the malarial threat. The third specification adds education level and religious denomination, both of which are likely endogenous to kinship. To test whether political engagement moderates the impact of kinship on attitudes, we add an interaction term between kinship and engagement using the second specification.

Results

In line with the results of the first study, stronger kinship tightness is linked to a preference for right-wing positions on cultural attitudes (see top panel of Fig. 6). The first model finds support for right-wing cultural attitudes and increases by .06 points (s.e. = 0.01, $p < 0.001$) on a 0–1 scale as Rs are moving from the least intensive kinship strength to the most intensive kinship strength, which supports H1 (see Tables A16 and A17 for complete results). When individual-level controls and ethnic group-level controls are included, the estimate increases slightly and remains statistically significant ($\beta = 0.06$, s.e. = 0.02, $p < 0.001$).

For economic attitudes, however, the story is different. Contrary to H2 and Study 1, both the model without the individual-level and ethnic group-level controls ($\beta = 0.05$, s.e. = 0.03), as well as the model with the controls ($\beta = 0.03$, s.e. = 0.05), did not reliably predict left-wing attitudes (see the right panel of Fig. 6). In fact, the coefficients point to kinship tightness predicting right-wing economic attitudes. For the results of each cultural and economic attitude question see Tables A18–A21.

We include a discussion of the sensitivity of these results to omitted variable bias in Appendix 3.5.

Political Engagement as a Moderator between Kinship and Economic Attitudes

Contrary to the engagement hypothesis (H3), kinship tightness neither predicts more left-wing economic attitudes among those who are the least politically engaged nor predicts more right-wing economic attitudes among the most politically engaged. In both models that predicted cultural attitudes, the interaction between political engagement and kinship tightness was

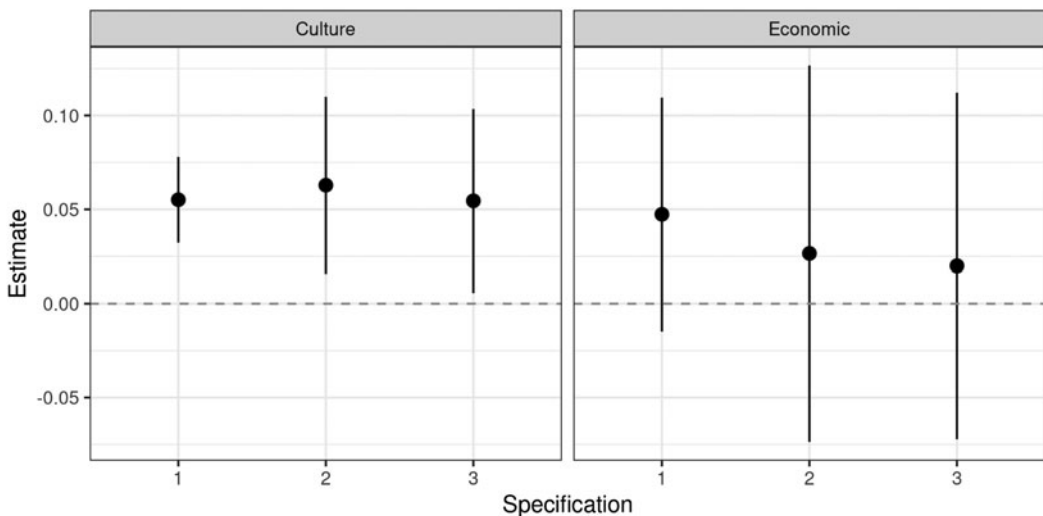


Figure 6. Study 2: Effects of Ancestral Kinship Strength, WVS Data. Specification 1 includes country and year and census region fixed effects. Specification 2 adds exogenous demographic covariates and ethnic group-level controls. Specification 3 adds R's religious denomination and education level. Error bars are 95 per cent confidence intervals.

statistically insignificant. We can only speculate as to why this relationship did not replicate. First, the countries included in Study 2 were those that contained respondents from two or more different ethnic groups – this culled the number of countries from ninety (in the original WVS) to thirty (versus 180 in Study 1), which may limit the generalizability of the results. Additionally, our measures of economic ideology and political engagement displayed poorer reliability than in Study 1. Finally, it may be the case that the relationship between economic attitudes and kinship strength is simply different for second-generation immigrants than it is for people who remain in their country of origin.

Study 3: Policy Implications of Ancestral Kinship

While kinship strength is clearly linked to political beliefs, is it also linked to policy outcomes? As a test of the policy implications of the previous findings, we examine whether the relationship between kinship strength and attitudes translates into differences in the relationship between kinship strength and public policy. This analysis also helps us understand the temporal boundaries of kinship strength. That is, does a country's past norms revolving around family structure still impact politics today? Since ancestral kinship is related to local ecology, a country-level analysis of policy outcomes is potentially more problematic than an individual-level analysis based on second-generation immigrants. However, we believe these results provide compelling suggestive evidence consistent with H1 and H2.

Data and Methods

Country-level LGBT laws

As an indicator of the cultural policies within a nation, we created an index that tallied how liberal a country's ($N = 154$) laws were towards LGBT rights in 2019, based on data from the International Lesbian, Gay, Bisexual, and Intersex Association.⁴ The tally consisted of nine items ($\alpha = 0.85$, $m = 1.81$, $s.d. = 1.78$). It included items such as whether the country allows same-sex marriage or civil unions, whether there are legal protections against employment discrimination, and whether consensual same-sex relations are legal (see Appendix 4.1). We rescaled this measure to lie between 0 and 1, where 1 indicates more anti-LGBT laws in a country, and 0 indicates more pro-LGBT laws in a country.

Country-Level Safety Net Laws

As an indicator of the social welfare policies within a nation, we use data from the Atlas of Social Protection Indicators of Resilience and Equity (ASPIRE), which is compiled by the World Bank.⁵ ASPIRE calculates the amount a large number of countries ($N = 105$) spends, as a percentage of the GDP, on unconditional cash transfers, conditional cash transfers, social pensions, school feeding, in-kind transfers, fee waivers, public works, and other social assistance. Expenditure data are based on official government records, international databases, and, when necessary, local consultants ($m = 1.47$, $s.d. = 1.32$).

We merge this data with the country-level ancestral kinship score. The distribution of these scores appears in Figure 7. Each outcome measure is then regressed on kinship score, ethnic group controls (years since observation in the EA and historical dependence on hunting and gathering), and continent fixed effects. In a second specification, we also include controls for the country's current GDP (logged), and the percentage of the population that was Catholic and Muslim, respectively, in 1900 (the mean year of entry into the Ethnographic Atlas). Since several papers have argued that kinship ties hinder development by encouraging corruption, these specifications should be considered as robustness tests.

⁴<https://ilga.org/>

⁵<http://datatopics.worldbank.org/aspire/>

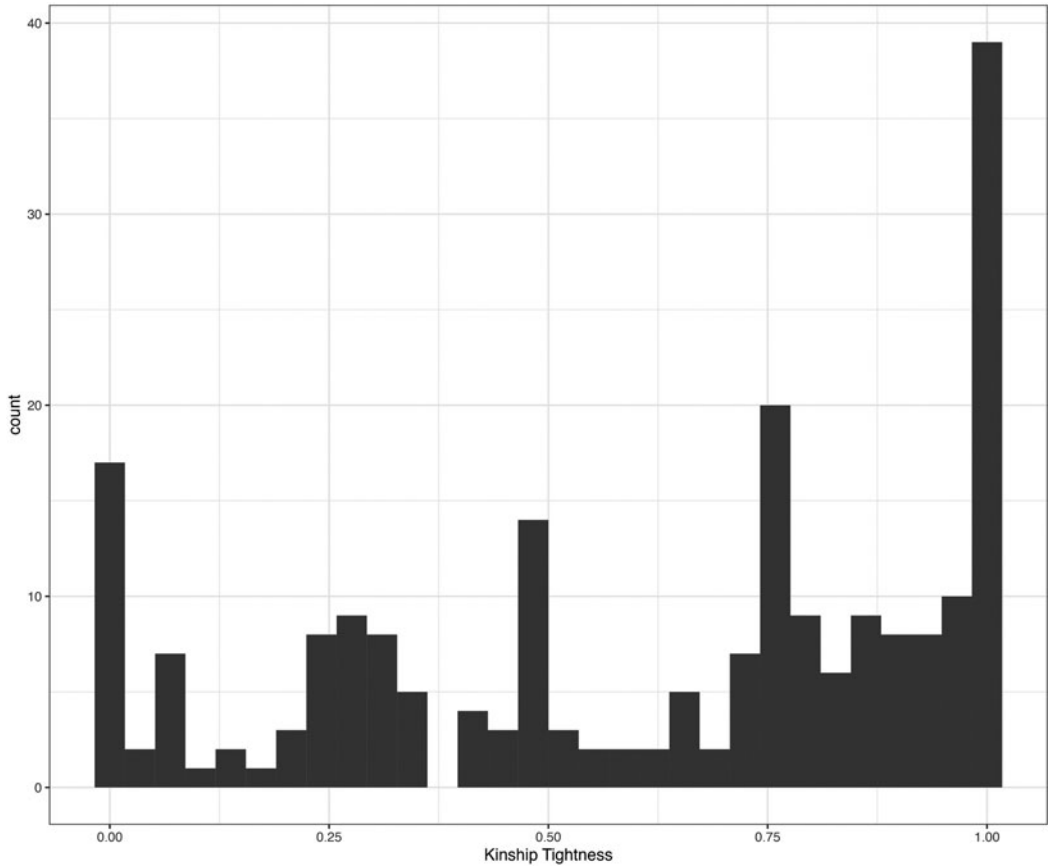


Figure 7. Distribution of Kinship Scores used in Study 3.

Results

In line with the individual-level analyses and H1, kinship strength is strongly associated with more anti-LGBT laws (Columns 1 and 2, Table 1). Moving from a country with the weakest kinship strength to one with the strongest increases anti-LGBT laws by 25 per cent ($p < 0.01$). While including the ethnic group-level controls does not change the coefficient estimates, including potentially endogenous measures, particularly HDI, the correlation is cut in half. Countries low on kinship tightness, such as Norway, Finland, Germany, and the United States, were much less likely to have implemented anti-LGBT laws, while countries high on kinship tightness, such as the Democratic Republic of the Congo, Grenada, and Liberia, were much more likely to have anti-LGBT laws.

The relationship between country-level kinship strength and social expenditure is in line with H2 (Column 3 and 4, Table 1). Moving from the weakest to the strongest kinship ties increases the number of social expenditures as a percentage of GDP by 1.06 per cent. Including other covariates does not affect results. Countries with low kinship and low expenditures include, for instance, Romania, Cambodia, and the Philippines, while countries with strong kinship ties and high expenditures include, for instance, Timor-Leste, Bosnia and Herzegovina, and Hungary.

In sum, ancestral kinship appears to be substantively and, at least marginally, significantly related to public policy. That is, ancestral kinship strengthens and increases the number of policies that offer cultural and economic protection. Note that, in line with our other studies, the

Table 1. The Relationship between Country-Level Ancestral Kinship Strength and Public Policy.

| | Anti-LGBT Laws | | Social Expenditures | |
|----------------------------|------------------|-----------------|---------------------|----------------|
| | (1) | (2) | (3) | (4) |
| Ancestral Kinship Strength | 0.255*** (0.071) | 0.139** (0.069) | 1.061* (0.578) | 1.078* (0.590) |
| Continent Fixed Effects | Yes | Yes | Yes | Yes |
| Control for Ethnic Group | Yes | Yes | Yes | Yes |
| GDP/HDI/Religion Controls | No | Yes | No | Yes |
| Observations | 180 | 170 | 115 | 113 |
| R ² | 0.561 | 0.647 | 0.154 | 0.184 |

Note: *p < 0.1; **p < 0.05; ***p < 0.01.

relationship between kinship strength and cultural policies is much stronger than the relationship between kinship strength and economic policies; for example, the zero-order correlation between country-level kinship strength and anti-LGBT policy was $r = 0.59$, and the zero-order correlation between country-level kinship strength and social expenditures was $r = 0.02$.

We discuss the sensitivity of these results to omitted variable bias in Appendix 4.2.

Discussion

This project demonstrates that pre-industrial family structure, rooted in the local ecology and the cooperation needs of a person's ancestors, influences contemporary political attitudes. We find that those with a background rooted in intensive ancestral kinship are more likely to hold right-wing cultural attitudes and, in several models, left-wing economic attitudes. The second study highlights the robustness of these findings using ethnic group-specific kinship scores. However, regardless of political engagement, we failed to find any relationship between kinship strength and economic attitudes. Finally, the third study shows that kinship strength is related to modern-day public policy. Importantly, our results are consistent for the relationship between cultural attitudes and kinship strength, but the relationship between kinship strength and economic attitudes is both weak and inconsistent across the studies. This may imply that, while the security that a social safety net offers may be appealing to those with a strong kinship background, there may be countervailing forces such as those suggested by Alesina and Giuliano (2014); that is, stronger kinship yields less demand for redistribution due to the internalization of support by the family.

Our results suggest that the family structure of a person's ancestors shapes political attitudes. However, we do not yet understand the mechanism through which kinship strength affects attitudes. One possibility is that, per Enke (2019), kinship shapes the values system (broadly defined) and, following a large literature in political psychology (Feldman 2003; Johnston, Lavine, and Federico 2017; Jost, Federico, and Napier 2009), 'individuals hold the attitudes they do because they resonate with underlying needs, interests and goals' (Jost 2017, 503).

In the appendix, we explore whether various values, particularly Schwartz's (2010) basic values, authoritarianism, and in-group versus out-group trust, might mediate the relationship. We find evidence that kinship strength predicts many of the values that scholars believe lie at the root of ideology. Including these values, along with kinship in a model predicting policy attitudes, only slightly reduced the effect of kinship (if at all). However, given known issues with mediation, particularly with observational data (Green, Ha, and Bullock 2010), we cannot conclude that these values mediated the effects of kinship. It is certainly possible that kinship affects policy attitudes through other mechanisms.

Political scientists generally agree that when it comes to political beliefs families and institutions matter. The current project demonstrates that conceptualizing the family as an institution, with rules designed to motivate certain behaviour while prohibiting other others, helps us

understand contemporary politics. Admittedly, the link between kinship strength and cultural attitudes was much more consistent (and stronger) than the link between kinship strength and economic attitudes. Future research should explore the conditions and mechanisms under which kinship strength indeed affects economic attitudes.

Rather than contradicting past literature on the origins of political attitudes, we believe this work largely complements that research. Political attitudes are believed to be rooted in: (1) personality and other psychological predispositions (Johnston, Lavine, and Federico 2017; Malka, Lelkes, and Soto 2019; Stenner 2005), (2) genetics (Alford, Funk, and Hibbing 2005), and (3) cue following (Zaller and Feldman 1992).

First, we have also suggested that kinship ties impact policy attitudes by affecting values and related personality traits. We find, consistent with Enke (2019) and Schulz et al. (2019), that kinship strength predicts values, and many have argued that these values are the foundation of political attitudes (Johnston, Lavine, and Federico 2017). We look forward to new methods and designs that can more formally test this suggested pathway.

Second, a genetic explanation is consistent with a cultural evolution perspective. For instance, both genetics and culture responded to threats from malaria in the form of the sickle cell gene and tighter kinship structure, respectively (Richerson, Boyd, and Henrich 2010). Similarly, humans evolved to digest plant starch more easily and developed tighter kinship networks in response to agricultural subsistence.

Third, these findings are not only entirely consistent with the evidence of family transmission of political attitudes (Jennings and Niemi 1968), they also extend these findings dramatically. Not only do we inherit our beliefs from our fathers and mothers, the main result of socialization literature, but we inherit our beliefs from our much earlier ancestors.

Finally, these results are also in line with the top-down model of political attitudes, at least in Study 1. We find that, at least among second-generation immigrants in Europe, people can align their underlying values, derived from kinship, to cultural attitudes, which are easier to understand (Carmines and Stimson 1980). When elite cues indicate that right-wing cultural attitudes typically go with right-wing economic attitudes, those with strong kinship ties who pay attention to politics no longer hold left-wing economic attitudes, similar to the findings of Johnston, Lavine, and Federico (2017) and Malka et al. (2014). Hence, the relationship between predispositions and attitudes is dependent on context and is contingent on political engagement (Federico and Malka 2018). However, this relationship does not replicate in Study 2, and we can only speculate why.

Of course, as this research relies on a 'selection-on-observables' assumption, causal claims should be taken with a grain of salt. As values and other cultural factors can be highly correlated (at least at the country and/or cultural level), we cannot rule out the possibility that our results could be a function of some other factor that is closely related to family structure. With that said, unlike other research tying family ties to political attitudes, ancestral kinship strength is clearly exogenous to contemporary attitudes. Further, sensitivity analyses (Cinelli and Hazlett 2020) also indicate that the potential omitted variables need to be strong to explain away the effects of kinship strength.

While we followed the methods of recent literature, which propose that political engagement moderates the impact of psychological predispositions on political attitudes, we cannot rule out some post-treatment bias. Unfortunately, randomly assigning political engagement is not plausible with this data. Happily, the correlation between kinship strength and political engagement is small, thus reducing bias. Nonetheless, the evidence for H3 (the moderation hypothesis) was inconsistent.

Although our results do suggest that policy attitudes are to some degree rooted in ethnic group differences, we note that culture is not destiny. That is, even within ethnic groups there is significant variation in policy attitudes (Desmet, Ortuño-Ortín, and Wacziarg 2017), and cultural transmission is not total. In fact, the effect sizes are smaller than other typical predictors of policy attitudes; for example, education and age. Additionally, although we only find partial evidence for the moderation hypothesis, if true it indicates that the expression of kinship on attitudes is

conditional on individual differences and context. Furthermore, culture, while ‘sticky’, is not static and will change as circumstances change (Nunn 2022). Nonetheless, these results help us understand why groups hold certain beliefs in the first place, and a better understanding of the origins of beliefs can open pathways toward empathy between groups.

In sum, this paper implies that our political beliefs depend not only on our parents’ political stances but also on where our ancestors literally stood. Ancestral cooperation needs, dependent on local ecology and pathogen risk (Enke 2019), shaped family structure, and family structure shaped the political beliefs of later generations. These ties help explain ideological conflicts in an increasingly multicultural world.

Supplementary Material. Online appendices are available at <https://doi.org/10.1017/S0007123422000709>.

Data Availability Statement. Replication Data for this article can be found in Harvard Dataverse at: <https://doi.org/10.7910/DVN/1QFIA1>.

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