The Organization of Ethnocultural Attachments Among Second-Generation Germans^{*}

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Recent research suggests that two ethnocultural "identities"—such as ethnic identity or national identity—can be *compatible* (positively correlated) or in *conflict* (negatively correlated) within and across immigrant-origin groups. In the present article, I advance a more cognitively oriented framework for using correlational patterns to map how immigrant-origin people organize their attachments to a variety of ethnocultural categories. In explaining the value of this framework, I embark on a multistage empirical illustration. First, I perform a correlational class analysis (CCA) using a sample of second-generation Germans and a vector of 13 identity-related indicators. Second, I use a series of linear regressions and a descriptive visualization to clarify the results of my CCA. Third, I fit multinomial logistic regressions that demonstrate how social attributes—and specifically, religion and ethnicity—impose constraints on the latent schemes that second-generation Germans follow to organize their ethnocultural "identities."

Keywords: Immigrant Identities; Relational Class Methods; Constraint; Germany.

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1 Introduction

Since their personal connections and affective ties often stretch across oceans and borders, individuals with migrant roots have a range of identity options available to them (see Verkuyten et al. 2019). To account for these varied options, recent studies have examined how immigrant-origin people interrelate attitudes about selfhood and determine which forms of ethnocultural identification (ethnic, religious, national *etc.*) are in alignment and which ones are at odds.

According to this growing literature, two bases of ethnocultural identification—say, national and ethnic identification—are *compatible* if they are positively associated and *conflicting* if the association between them is negative (Fleischmann, Leszczensky, and Pink 2019; Fleischmann and Phalet 2016; Martiny et al. 2017). Understood in this way, relationships between immigrant "identities" can range from absolute discordance (r = -1) to absolute concordance (r = 1).

The goal of this article is not to challenge the logic of this correlational approach, but to propose a more cognitively oriented framework for using correlational patterns to explore how immigrant-origin people organize their attachments to ethnocultural categories. In existing work, these attachments (which are often described as *identities*) are generally treated as independent attributes that can be isolated using regressions or other variable-centered techniques, while the relationships between "identities" are often summarized using average, population-level coefficients. In the sections to follow, I argue that this treatment provides a limited view of how immigrant-origin people interrelate attitudes about selfhood.

My broader argument consists of two key propositions. First, attitudes about the self do not exist on their own — say, as "ethnic identities" or "national identities" that can be pulled apart or isolated in empirical settings pursuant to the logic of regression modelling (cf. Abbott 1988, 1995; Emirbayer 1997). Instead, they belong to a bundle of self-related attitudes, ideas and beliefs that routinely co-occur within individuals and can, in principle, be held together in the mind via patterns of concordance and discordance (see Baldassarri and Goldberg 2014; DellaPosta 2020; Martin 2002). Second, all immigrantorigin people do not organize their self-related beliefs in the same way; instead, different thought communities turn to different schemes, logics and principles to interrelate attitudes about ethnocultural selfhood (see DiMaggio et al. 2018; Sotoudeh and DiMaggio 2021).

Taken together, these propositions call for a conceptual shift: to think about self-related attitudes as a bundle of interconnected nodes (or co-occurring positions) and to acknowledge that multiple patterns of concordance and discordance (what scholars typically call *identity compatibility and conflict*) can exist within a single population of immigrant-origin respondents.

After discussing what is gained by implementing this shift, I turn to a multistage empirical illustration. I begin by applying correlational class analysis (CCA)—a graph partitioning technique that clusters respondents into cultural subgroups based on how they associate concepts (Boutyline 2017)—to a longitudinal sample of second-generation adolescents in Germany and a vector of 13 identity-related

variables. Ultimately, I find three subgroups in my sample who align and dissociate their ethnocultural attachments in distinct ways.

The associative patterns that define each subgroup [what McDonnell, Stoltz, and Taylor (2020) call "patterns of relative adjudication"] reflect complex networks of attachments that have not been detected in previous research: for instance, *none* of the subgroups are defined by sharp oppositions between ethnic and national attachments; attachments to dual identity (i.e., origin-German) labels are *compatible* with ethnic and religious identification for some respondents, but in *conflict* with ethnoreligious attachments for others; and a subset of respondents positively correlate religious and national identification while weakly associating their ethnic and religious "identifies."

These associative patterns (or networks of conflict and compatibility) can be described as logics, construals or organizing schemes. Throughout this paper, I use the latter term to describe the latent construct driving individuals to organize their self-related attitudes in pattern-wise fashion. In the second stage of my analysis, I use six linear regressions and a descriptive visualization to clarify the differences between the schemes identified via the CCA procedure and to highlight how these schemes are adopted by respondents who *organize* their attitudes in similar ways, not those who display similar levels of attachment to various identity categories.

In a final empirical illustration, I briefly consider why individuals adopt specific organizing schemes over others. Drawing on a long line of research exploring immigrant integration in Western Europe (e.g., Foner and Alba 2008; Zolberg and Woon 1999), I zero-in on religious affiliation as a likely part of the explanation. To this end, I begin by estimating a multinomial logistic regression model where cluster assignment (or adoption of one the three schemes identified via the CCA) is the outcome variable and religious affiliation is the focal predictor.

Even after adjusting for a vector of background variables, I find that religious affiliation significantly influences how second-generation immigrants organize their ethnocultural "identities." More concretely, I find meaningful differences in the cluster membership profiles of second-generation Muslims *vis-à-vis* their immigrant-origin peers in Germany — a finding in line with a burgeoning literature on the cultural heterodoxy of, and social closure experienced by, European Muslims (Drouhot 2021; Foner 2015; Karim 2023; Ng 2022).

These patterns are, however, only part of a broader story. Within faith communities, there is a considerable amount of relational heterogeneity—or multiple routes to forging associations between "identities"—that has been masked in the extant literature. To help explain these heterogeneities, I fit a second multinomial model where cluster assignment is regressed on the *interaction* between religion and ethnicity along with a set of covariates. In doing so, I reveal meaningful differences in cluster membership probabilities at the *intersection* of denomination and ethnicity for some immigrant-origin Christians, and between Turkish and non-Turkish Muslims as well. As I argue, detecting these heterogeneities is a key benefit of the conceptual and empirical strategy presented in this article. Exploiting this strategy should,

in principle, allow future research to unpack how organizing schemes are distributed across and *within* immigrant-origin communities.

2 Interrelationships Between Immigrant "Identities"

In his classical treatise on assimilation, Gordon (1964) argued that members of immigrant-origin groups would, in time, shed their ethnic and cultural attachments to the country of origin and encode "a sense of peoplehood based exclusively on (the) host society." In effect, Gordon saw ethnic and national attachments as *intrinsically* oppositional — i.e., tightly linked through a chain of negative associations such that higher levels of national identification (within individuals, across generations and so on) would naturally depress levels of ethnic identification.

In recent decades, the literature on immigrant identities has moved past these unilineal assumptions by highlighting multiple pathways to immigrant incorporation, none of which require the disappearance of ethnic attachments, diacritics or distinctions (Brubaker 2001; Nee and Alba 2013). In contrast to linear models of ethnic decay associated with classical assimilation theory, these studies offer a richer portrait of the diverse and cross-cutting identity options that are available to immigrants and their descendants in host societies around the world (Berry 2017; Spiegler, Wölfer, and Hewstone 2019; Verkuyten et al. 2019; Wiley et al. 2019).

Despite this theoretical shift, the assumption that different aspects of ethnocultural selfhood are tightly linked has persisted. While classical scholarship viewed the association between ethnic and national identification as decidedly negative, recent work has embraced a wider range of possibilities. For instance, studies exploring acculturation (Phinney et al. 2006), oppositional identifies (Battu and Zenou 2010) and national disidentification (Verkuyten and Yildiz 2007) often sugest that national, ethnic and religious attachments are chained together via negative or positive associations in the minds of immigrant-origin people, while papers evaluating whether immigrants' "identities" are *compatible* (positively associated) or in *conflict* (negatively associated) cast this correlational logic into high relief (Fleischmann et al. 2019; Fleischmann and Phalet 2016; Martiny et al. 2017).¹

While focused on different substantive issues, the studies listed in the preceding paragraph advance similar claims about the *organization* of immigrants' ethnocultural attachments—namely, that attachments to different identity categories are, to varying degrees, interrelated among immigrant-origin subpopulations. However, the cognitive implications of this claim have not been fleshed out in the existing

¹ More generally, a variety of studies in social psychology, sociology and cognate fields have discussed the *compatibility* (or lack thereof) between group "identities." This includes work on nested identities (Medrano and Gutiérrez 2001; Wimmer 2009), nationalist beliefs or identifications (Gorman and Seguin 2018; Huddy, Del Ponte, and Davies 2021) and superordinate identities more generally (e.g., Gaertner et al. 1999).

literature, leading to an incomplete view of how ethnocultural attachments are organized among individuals with immigrant roots.

3 Constraint and Attachments

Research on the organization of immigrant "identities" belongs to a broader body of scholarship that explores the interrelationships between *attitudes* or beliefs. This literature spans multiple fields, from social and political psychology (Brandt, Sibley, and Osborne 2019; Converse [1964] 2006; Fishman and Davis 2022) to the sociological study of culture and cognition (Boutyline and Vaisey 2017; DellaPosta 2020; Keskintürk 2022). Across these fields of inquiry, attitudes are assumed to be linked via a series of pairwise associations — an idea inspired by (but only a rough approximation of; cf. Boutyline and Soter 2021) associative models of social learning.

More concretely, units of personal culture tapped by social survey instruments (e.g., attitudes about selfhood) are viewed as the building blocks of broader schematic structures or systems of belief that emerge out of repeated cultural exposures over the life course—and thus, are understood to be interconnected. To the extent that this is true, responses to items tapping attachment to one identity category (e.g., ethnicity) should *constrain* responses to items tapping other aspects of ethnocultural identification (e.g., religion or nation).

What does it mean for one attitude to *constrain* another attitude? To Converse ([1964] 2006: 3), "... 'constraint' or 'interdependence' refers to the probability that a change in the perceived status (truth, desirability, and so forth) of one idea-element would *psychologically* require, from the point of view of the actor, some compensating change(s) in the status of idea-elements elsewhere" in a belief system. More broadly, attitudes (idea-elements) are, in Converse's view, organized around an internal but socially patterned logic of association that binds different beliefs together in a system of interrelations (ibid). Studies exploring the organization of immigrant identities implicitly test this idea by mapping how attitudes about ethnocultural selfhood are (or are not) linked together "via webs of implication" in the mind (see Martin 2002).²

To capture this constraint in survey data, researchers have estimated bivariate associations between pairs of ethnocultural "identities" using correlation matrices, regression models, dynamic panel models and other variable-centered techniques. Some general patterns have emerged in this literature: i.e.,

² To be sure, associative patterns at the population or subpopulation level (i.e., how scholars have typically operationalized constraint in empirical settings; see Martin 2002) may not derive from complex ideological systems—or in the context of identities, vivid self-portraits—that are internalized by social actors who explicitly perceive entailments or antinomies between the beliefs they hold. Rather, group-level correlations may simply reflect ecological noise and the clustering of concepts, beliefs or positions in the environments that individuals are embedded within (Boutyline 2022; Martin 2010). I build on this point in Section 7.3 of this paper.

Respondent	Nation	Ethnicity	Religion	Dual Identity
Ömer	Ι	5	5	4
Sara	5	Ι	Ι	2
Aylin	4	4	3	4
Andrei	2	2	Ι	2

Table 1: Response Profiles for Four Hypothetical Survey Respondents

associations between ethnic and national attachments tend to be negative (Phinney et al. 2006), associations between ethnic and religious modes of identification tend to be positive (van Heelsum and Koomen 2016), while religious and national attachments tend to be inversely linked (Fleischmann and Phalet 2018) among immigrant-origin samples in Western Europe.³

These studies have offered rich insights into the dynamics of identity formation among immigrantorigin people. Yet, by framing interrelationships between identity categories in dyadic terms, they have provided a limited view of how immigrants and their descendants organize their self-related attitudes more broadly. As I detail in the next section, analyzing bivariate associations in isolated, pairwise matchups ignores the *overall* pattern of relationships that underlie a system of beliefs (say, about ethnocultural selfhood) and can obscure the extent to which any two respondents display the same pattern of concordance and discordance (see Baldassarri and Goldberg 2014; DellaPosta 2020; Martin 2002). To illustrate this point, I turn to a stylized example.

4 A Motivating Example

This section presents a stylized example to clarify what existing studies have missed (or at least failed to consider) when analyzing the organization of immigrants' attachments. Table 1 features four hypothetical survey respondents in Germany—Ömer, Sara, Aylin and Andrei—and lists their responses to items tapping attachments to Germany (*the nation*), their origin society (*ethnicity*), their faith community (*religion*) and a hybrid, origin-German label (*dual identity*).

The response vectors for Ömer and Sara (the first two respondents in Table 1) are counterimages of one another: Ömer scores high on ethnic and religious identification but is not attached to Germany; Sara is deeply attached to Germany, but scores low on ethnic and religious identification. Despite their substantive disagreements, Sara and Ömer follow the same *organizing scheme* or "pattern of evaluation" (Taylor and Stoltz 2020) to distinguish the four survey items: most notably, national identification

³ However, recent findings have cast the generality of these findings into question (see Fleischmann et al. 2019; Niechziol and Medeiros 2022).



Figure 1: Correlation matrix for all four respondents featured in Table 1 and two hidden subsets.

appears to be *in conflict* with ethnic, religious and dual identification.⁴

The other respondents (Aylin and Andrei) organize responses to the four survey items pursuant to a *second* latent scheme. Aylin's views about nationhood, ethnicity, religion and dual identification directly parallel Andrei's, but are simply *shifted* up or higher in intensity. For example, despite reporting different levels of attachment to the four ethnocultural categories, both Andrei and Aylin assign more weight to dual identity than to their religious attachments and equal weight to their ethnic and national "identities."

Figure 1 highlights what we lose when these relational differences are not taken into account. Each panel in the figure visualizes interrelationships between the four identity-related items listed in Table 1 for different populations of interest. The panel on the left summarizes the *global* correlation matrix (for all respondents), the panel in the center visualizes the correlation matrix for Sara and Ömer, while the panel on the right summarizes the correlation matrix for Aylin and Andrei. In the leftmost panel, the two organizing schemes described in preceding paragraphs are subsumed under a single matrix of associations that summarizes some networks of conflict and compatibility (Ömer and Sara's) better than others (Aylin and Andrei's).

A single correlation matrix *may*, of course, fit a dataset featuring thousands of observations well. However, this is an assumption that needs to be tested using techniques that can detect unobserved

⁴ In this paper, *conflict* and *compatibility* are used descriptively—i.e., as simple short-hands for negative and positive ecological correlations. Therefore, readers should avoid applying a psychological interpretation to the terms.

subpopulations in a dataset who organize item-responses in distinct ways (should these subsamples exist) — i.e., by being sensitive to what scholars have called *relational heterogeneity* (DiMaggio et al. 2018; see also Goldberg 2011). Detecting this heterogeneity is critical for understanding the social foundations of immigrants' ethnocultural attachments, a point I flesh out below.

5 The Substantive Implications

In the last section, I explained why distinct patterns of "identity conflict and compatibility" are difficult to *statistically* isolate if self-related attitudes are analyzed one pair at a time. Figure 1 makes this point clear: while all four respondents positively correlate their ethnic and religious attachments, they use distinct organizing schemes to arrive at these associative patterns. In the current section, I explain why this is *substantively* consequential.

To put it simply: the organizing scheme a respondent follows carries traces of their exposure to different aspects of public culture (institutions, classification schemes, narratives and so on; see Lizardo 2017) over the life course. These exposures can, in time, crystallize as associative ties that bind an individual's self-related attitudes together.

Imagine the life experiences of Ömer and Sara: two (hypothetical) respondents featured in Table 1 and Figure 1. For both respondents, national identification appears to be in conflict with attachments to ethnic, religious, and dual identity labels. However, Sara and Ömer's *views* about self-identity are diametrically opposed: for Ömer, levels of national identification are very low; for Sara, they are very high. Why would two respondents with antithetical positions on self-identity come to organize their ethnocultural attachments using the same latent scheme?

In short, these associative similarities tell us something about the social and institutional environments that Sara and Ömer are nested within (see Goldberg 2011). Specifically, Ömer and Sara were likely exposed to bright *symbolic boundaries*—i.e., sharp sociocultural distinctions between their communities of origin and society writ large—that gained resonance via encounters on the street (Papadantonakis 2020), the frames they observed in classroom settings (Wood et al. 2018), the discourses they learned and internalized as part of their media diets (Cisneros 2008), or the sermons they received inside houses of worship (Kim 2010).

For Sara and Ömer, these experiences were translated into negative associations between their ethnic and national attachments, such that higher levels of identification with one category mapped onto lower levels of attachment to the other. For Aylin and Andrei (see Table 1 and Figure 1), different *kinds* of cultural exposures over the life course—perhaps due to their friendships with ethnic Germans or experiences in "superdiverse" (*contra* consolidated) classrooms (see Zhao 2023)— led to affinities between all aspects of the ethnocultural self.

As the foregoing discussion helps illustrate, analyzing the entailments or oppositions between immigrant "identities" can offer important clues about the social milieus (or *contexts of reception*; see Portes and Rumbaut 2001) that immigrant-origin people inhabit. By mapping this symbolic terrain, analysts can systematically track how organizing schemes are distributed across sociodemographic lines and draw inferences about the cultural roots of group differences. Moreover, researchers can capture differences *within* social groups that reveal the extent to which sociodemographic attributes structure the organization of "identities."

Using tools at the intersections of cognitive and cultural sociology, the present study attempts to extract the organizing schemes discussed in Sections 4 and 5 from social survey data. In addition, it seeks to unpack how social attributes influence the type of organizing scheme a respondent follows. To achieve these goals, I implement a multistage empirical strategy. Below, I flesh out this strategy in greater detail and discuss the panel survey at the heart of my analysis

6 Data and Methods

6.1 Data and Setting

The analysis to follow draws on data from the *Friendship and Identity in School* (FiS) survey, a panel study of over 2,700 students in the German federal state of North Rhine-Westphalia. The first wave of the survey featured students in grades five to seven; these respondents were followed for up to five additional waves that were administered in nine-month intervals from 2013 to 2017. For more information about the survey, please consult Leszczensky et al. (2020).

Situating my analysis in North Rhine-Westphalia (NRW), Germany provides analytic leverage. NRW not only "features a high share of students with a migration background" (ibid) but is, on an aggregate scale, religiously fragmented: Catholics represent roughly 36% of the population; around 23% of the population is Protestant; and the rest of the population are either unaffiliated or members of non-Christian faith communities (Evangelische Kirche in Deutschland 2021). Moreover, *schools* in Germany are where compositional shocks and changes in the country (e.g., along ethnic lines) are felt most acutely, and where inequality produced through systems of academic sorting are deeply patterned by ethnicity and religion (Kruse and Kroneberg 2019). Taken together, these demographic and contextual characteristics should make religious and ethnic differences socially resonant in NRW, which should, in turn, influence how respondents interrelate attitudes about ethnocultural selfhood.

6.2 Analytic Strategy

My analysis has three parts. I begin by applying a correlational class analysis (CCA) to a subset of the FiS sample. Then, I estimate six linear regressions to simplify the patterns that distinguish CCA clusters before using a descriptive visualization to explain how these subgroups differ from the clusters generated by more conventional approaches to data segmentation. In a final step, I fit multinomial logistic regressions that treat cluster assignment as the target variable and religious affiliation—as well as the interaction between ethnicity and religion—as the predictor(s) of substantive interest. This allows me to determine whether members of different faith communities are more likely to follow certain organizing schemes *vis-à-vis* others.

Across these three stages, I apply two inclusion criteria. First, I only include second-generation respondents because they are, as the native-born children of immigrants, uniquely positioned to stake claims to membership in several ethnocultural communities at the same time (Fleischmann and Phalet 2016; Portes and Rumbaut 2001; Rumbaut 2008). Second, I remove observations (respondents at time *t*) with missing values on any of the 13 identity items listed in Table 2 since imputation "is fundamentally at variance with the relational nature of CCA by assigning individuals scores based on aggregate statistics" (Daenekindt, Koster, and Waal 2017: 808). After applying these criteria, I arrive at an analytic sample of 3,343 observations.⁵

7 Finding Organizing Schemes in Survey Data

7.1 CCA: An Overview

CCAs are an extension of relational class analysis (RCA), a modelling framework introduced in Goldberg's (2011) seminal article on the measurement of shared understandings. In the article, Goldberg set out to locate cultural schemas—"socially shared representations deployable in automatic cognition" (Boutyline and Soter 2021: 730)—in attitudinal data. A comprehensive overview of the cultural theory underlying RCAs, CCAs and other schematic class analyses is beyond the purview of this paper. For a richer discussion, see Boutyline (2017), Goldberg (2011) or Taylor and Stoltz (2020).

All schematic class analyses build on the logic used by Goldberg (2011) to develop RCA as a tool for the quantitative measurement of meaning-making and intersubjectivity. The basic intuition behind

⁵ Some readers may question the inclusion of a dual identity item *on top* of items probing national and ethnic identification. The decision was made based on a review of the literature and broader theoretical considerations. As several scholars have noted (see Fleischmann and Verkuyten 2016; Hopkins 2011; Simon and Ruhs 2008; Verkuyten et al. 2019), we cannot *a priori* assume that dual identification—in terms of its intensity or *meaning*—is a composite function of one's ethnic and national attachments. The results presented in this paper clearly reinforce this point.

Indicator	Definition	Range
Nation (I)	Being German is an important part of who I am	
Nation (T)	It troubles me if somebody speaks ill of Germany	-
Nation (D)	Germany is dear to me	-
Nation (P)	I feel like I am part of Germany	-
Origin (I)	Being [<i>ethnic origin</i>] is an important part of who I am	
Origin (T)	It troubles me if somebody speaks ill of [<i>origin community</i>]	(Strongly Disagree to
Origin (D)	[Origin community] is dear to me	- Strongly Agree)
Origin (P)	I feel like I am part of [<i>origin community</i>]	-
Religion (I)	Being [<i>religion</i>] is an important part of who I am	-
Religion (T)	It troubles me if somebody speaks ill of [<i>religion</i>]	-
Religion (D)	[<i>Religious community</i>] is dear to me	-
Religion (P)	I feel like I am part of [<i>religious community</i>]	-
Dual ID	I feel like I'm both German and a member of [origin community]	-

Table 2: Indicator Variables

Note: (I) indicates *importance*; (T) indicates *troubles*; (D) denotes *dear*; and (P) denotes *part*.

RCAs was laid out in the front end of this manuscript. Simply put, they aspire to identify clusters of respondents—such as Sara and Ömer or Andrei and Aylin—who *associate* items in similar ways or follow the same organizing scheme to interrelate survey responses.

In RCAs, the schematic similarity between two respondents is determined by a pairwise *relationality* score (a scale that runs from -1 to 1). This score summarizes *between-respondent* variation in *withinrespondent* differences⁶ in item-response values. In a second step, the *absolute* pairwise relationalities (a scale that runs from 0 to 1) for all respondents in a dataset are used to create a large adjacency matrix; running a graph partitioning algorithm on this matrix yields the clusters (Aylin and Andrei; Ömer and Sara) that an RCA sets out to find. Finally, the set of inter-item correlations that define each cluster are used to interpret the substantive meaning of the classes identified through the clustering procedure.

In a recent innovation, Boutyline (2017) extended relational class analysis (or RCAs) to *correlational* class analysis (or CCAs). As Taylor and Stoltz (2020) explain, CCAs and RCAs are based on the same set of principles, but with one important difference: in lieu of using relationality as a measure of schematic similarity, CCAs rely on the absolute *correlation* between pairs of observations (or rather, their item-response vectors). This shift is based on the intuition that if any two observations interrelate atti-

⁶ This *within-respondent* variation is calculated by transforming a *respondent*'s (e.g., Ömer's) vector of survey responses into a square matrix of pairwise arithmetic differences. The schematic similarity across respondents (e.g., between Aylin and Sara) is based on the overall distance between their respective *within*-respondent matrices. For a more detailed and technical overview, see Goldberg (2011) and Boutyline (2017).



Extremely Strong Weak or Moderate

Figure 2: Relationships between eight hypothetical respondents (based on absolute row correlations).

tudes using the same organizing scheme or logic, their response patterns should be *linear transformations* of one another; simulations and model comparisons showing that CCA outperforms RCA across a range of empirical settings lend credence to this idea (Boutyline 2017; but see Sotoudeh and DiMaggio 2021).

To simplify how CCAs transform response vectors into schematic clusters, I turn to Figure 2. In the figure, I include the same hypothetical respondents we encountered before (Aylin, Ömer, Andrei and Sara) as well as five hypothetical classmates. In technical terms, CCAs turn the relationships between respondents (or survey rows) into a weighted, undirected graph where the nodes are respondents and the ties are absolute correlations between respondents' response vectors (e.g., Aylin and Ömer's attitudes towards ethnicity, religion *etc.*).⁷

In Figure 2, darker lines indicate that two respondents organize their attitudes in similar ways, while lighter lines indicate that the association between two respondents' response vectors (whether positive or negative) is weak or moderate. Using a modularity maximization algorithm, CCAs should split the

⁷ To improve performance, pairwise correlations that are insignificant (at an α of 0.05) are set to 0.

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overall graph into two communities: the five respondents clustered near the top of the plot (including Aylin and Andrei); and the three respondents clustered near the bottom (including Ömer and Sara). In CCA results not shown here, I confirm this cluster solution using 1000 copies of the eight respondents featured in Figure 2.

7.2 CCA vs Other Clustering Methods

CCAs are designed to find population clusters bounded by similar patterns of *tightness* or entailments between attitudes (see Martin 2002). When applied to attitudinal data, conventional approaches to data segmentation (e.g., *k*-means clustering, latent class models) cluster on another property of belief systems—*consensus* (ibid.)—and identify clusters of individuals who hold similar beliefs, opinions or latent orientations (DiMaggio et al. 2018).

Recall that Ömer scored low on national identification and high on ethnoreligious identification, while the inverse was true for Sara. If we were to use a standard data segmentation method, Sara and Ömer would be assigned to different clusters due to their contrasting views — an intuition I confirm via a *k*-means clustering exercise not shown here. Despite their divergent beliefs about self-identity, Ömer and Sara *associated* concepts by following the same scheme, while many of their peers (e.g., Aylin and Andrei, Matvey and Irem and so on) followed an alternative schematic framework to organize their ethnocultural attachments (see Table 1 and Figures 1 and 2). To identify *these* cultural subgroups—or subpopulations who *associate* item-responses (and attitudes) in similar ways—CCAs should be favored over conventional clustering techniques. However, to find cultural subgroups who generally agree on a set of items, latent class analyses and other finite mixture models should be used in lieu of relational class methods like CCA.

7.3 CCAs and Perceptions

The conceptual framework introduced in the front end of this manuscript is, in some respects, concerned with processes unfolding within the minds of individuals. Thus, it heeds Brubaker, Loveman, and Stamatov's (2004) call to treat ethnocultural phenomena as *cognition*: as perspectives *on* the world, not entities *in* the world. Moreover, it draws on Converse's ([1964] 2006) classical theory of belief systems as webs of constraint or implication: i.e., where perceived oppositions and affinities between "idea-elements" serve as the building blocks of ideology.

CCAs and RCAs are often deployed to capture these internal sources of constraint in surveys. The basic intuition is straightforward: respondents who organize item-responses using the same latent scheme should *perceive* the relationships between attitudes in similar ways. Yet, there is no principled way to determine whether the associative relationships detected by relational class methods capture perceptions or are instead forged via *external* sources of constraint. More plainly, patterns of conflict and compatibility at an aggregate level (e.g., within the Ömer, Sara and Emre cluster in Figure 2) can emerge due to common perceptions of concordance and discordance within the minds of subgroup members or bear the residue of ecological coincidence (see Boutyline 2022; Martin 2010).

A cluster of immigrant-origin respondents may, for instance, perceive a conflict between their ethnic and national attachments due to durable self-schemas that serve as cultural anchors, powerfully organizing item-responses in turn (cf. Miles 2014). Conversely, negative associations between ethnic and national attachments "might simply reflect how these positions are bundled in information streams" (Boutyline 2022: 16)—say, if respondents with high levels of national attachment gravitate towards friends who do not treat ethnicity as a locus of collective identification (or vice versa; cf. Leszczensky and Pink 2019). This may, in time, lead to high levels of national identification co-occurring with low levels of ethnic identification (or vice versa) among certain subpopulations *even if* subgroup members do not perceive an opposition between ethnicity and nation.

Yet, it is likely that different identity-related beliefs are (*to some degree*) mutually entwined within the minds of immigrants and their descendants. In line with this view, a range of qualitative studies have shown that attachments to different ethnocultural categories are "negotiated" by immigrant-origin people as they author their narratives of selfhood (e.g., Drouhot 2023; Hopkins 2011; Ozyurt 2013; Wang, Raja, and Azhar 2020), a process deeply conditioned by the politics of cultural accommodation, syncretism and integration in destination societies.

There are, however, other interpretations that readers should be mindful of: as noted, the associative patterns detected by CCAs might flow from the structure of the environment as opposed to the mindscapes of respondents. Whether they *directly* derive from internal or external sources of constraint (or both), the organizing schemes discussed in the sections to follow should, in my view, emerge out of a common environmental origin or point of departure: i.e., the symbolic boundaries that structure social, political and civic life in NRW, Germany.

8 CCA Results

8.1 Correlational Patterns

Having clarified the logic of CCAs, I now turn to the results of the first stage of my analysis. Using the corclass package in R, I apply a CCA to my full sample of observations⁸ and arrive at a three-

⁸ Thus, the same respondent can be assigned to different classes over time. Of all respondents to appear in multiple waves, 63.9% transitioned from one cluster to another cluster on at least one occasion.



Figure 3: Set of correlograms summarizing the correlation matrix associated with each latent scheme identified through the CCA procedure. The percentages (in brackets) reflect the share of all observations assigned to a given class.

cluster solution.⁹ Each of these clusters is defined by a unique correlation matrix (or set of inter-item correlations) that, in principle, reflects a distinct organizing scheme.

In the spirit of simplicity, I assign the following labels to the schematic classes identified through the CCA procedure: *Ethnicity-Religion* (ER), Concordant and *Nation-Religion* (NR). Figure 3 visualizes the differences between these schemes using a set of correlograms. Each box in a correlogram represents the pairwise association between items on the *x* and *y* axes for a given schematic class. For instance, among

⁹ Following other scholars, I use a multiple-groups analysis framework from structural equation modelling to evaluate whether a single correlation matrix fits the data as well as the multiple matrices identified through schematic clustering. Whether I use the full sample of observations or analyze each wave in isolation, CCA clusters fit the data better than the single matrix equivalents (or the relational homogeneity models) based on both AIC and BIC values—*except* for wave six (which featured significant attrition). For full results of this model comparison exercise, please contact the author.

ERs, the correlation between Dual Identity and Religion (I) is -0.24; among *Concordants*, the association between the same two items is 0.55. In Appendix A, I show that limiting my sample to one row of observations per respondent (i.e., by isolating the latest wave for every student) does not affect my results.

8.2 Clarifying Cluster Differences

Summarizing each pairwise association depicted in Figure 3 would lead to an overly complex empirical portrait. Thus, to ease interpretation, I first transform the set of survey items listed in Table 1 into a smaller set of scales related to national, ethnic (origin), religious and dual identification (using mean scores for the first three dimensions). Then, I use a series of linear regressions to clarify how class assignment into the Ethnicity-Religion, Concordant or Nation-Religion categories moderates the relationships between these scales. Finally, I use a descriptive visualization to discuss what these classes do not capture (belief agreement) to further clarify the substantive meaning of the latent construct of interest (organizing schemes).

The first item (scale construction) is worth explaining in more detail. As Figure 3 illustrates, there are 78 pairwise associations that distinguish the three schemes identified by the CCA procedure. Describing each of these associations and noting how they differ across clusters would muddy interpretation of the overall *patterns* that serve as empirical signatures for each organizing scheme.

Scales can help simplify the story. Of course, using scales as *input* variables for CCAs or other methods designed to capture relational heterogeneity would introduce bias, as fine-grained differences at the subscale level would be reduced to noise or averaged out.¹⁰ However, as Baldassarri and Goldberg (2014) have shown, using scales *after* schematic clustering can substantially reduce the universe of pairwise associations that need to be described while retaining information (via class membership) about relational differences that were detected during the clustering process.

8.3 OLS Specifications and Results

To clarify the differences between the three classes identified by the CCA, I reduce the 78 pairwise associations featured in Figure 3 to six using a set of six linear regressions. All six models include survey wave fixed-effects and standard errors clustered at the respondent-level. In each model, a specific identity scale (e.g., *ethnicity*) is regressed on the interaction between a different identity scale (e.g., *religion*) and cluster assignment — a discrete variable with three levels: Ethnicity-Religion (ER), Concordant and

¹⁰ For example, among NRs, the association between Origin (T) and Religion (T) is positive while the association between Origin (H) and Religion (T) is negative. These pockets of relational variation are flattened when scales are used in lieu of individual items ahead of schematic clustering.



Note: Each scale—ethnicity, nationality, religion and dual identity—ranges from 1 to 5 (i.e., low to high levels of attachment).

Nation-Religion (NR). Since the objective of this exercise is to highlight broad differences across clusters, no additional controls are included.

I use Figure 4 to present regression results while relegating parameter estimates to Appendix B. The six panels in Figure 4 visualize the average marginal effects (AMEs) associated with the focal regressor in each model at different levels of cluster assignment. More concretely, each panel summarizes the association between two identity scales listed in the panel text for the three subsamples identified via the CCA. Below, I use Figure 4 as a guide to discuss the characteristics that distinguish the three organizing schemes.

8.3.1 Ethnicity-Religion Scheme

As the patterns visualized in Figure 4 suggest, the *Ethnicity-Religion* (ER) scheme is defined by (i) the *absence* of a significant relationship between ethnicity and nationality or religion and nationality

Figure 4: Average marginal effect (AME) associated with a one unit increase in the value of the focal regressor (e.g., Ethnicity in Model 1 or Nationality in Model 4) on the value of the outcome variable (e.g., Nationality in Model 1 or Dual Identity in Model 4). As the note embedded in the plot suggests, each identity scale (ethnicity, nationality, religion, dual identity) has a theoretical range between 1 and 5. Across all models, survey wave fixed effects are included and standard errors are clustered at the respondent level. In the plot, line ranges (or "whiskers") correspond to 95% confidence intervals.

(Models 1 and 2); (ii) sharp positive associations—or compatibilities—between religion and ethnicity as well as nationality and dual identity (Models 3 and 4); and (iii) sharp negative associations—or conflicts between ethnicity and dual identity as well as religion and dual identity (Models 5 and 6). As a whole, ERs account for 41% of all observations

8.3.2 Concordant Scheme

Respondents in the *Concordant* class—i.e., 32% of all observations—follow a latent, organizing scheme marked by positive associations between all aspects of ethnocultural selfhood. These hidden networks of compatibility are easy to spot in Figure 4: indeed, *all* AMEs for Concordants are positive and reach significance at conventional levels. In terms of magnitude, associations between religion and ethnicity (Model 3), ethnicity and dual identity (Model 4), and religion and dual identity (Model 5) are especially strong among Concordants.

8.3.3 Nation-Religion Scheme

The *Nation-Religion* (NR) scheme—i.e., followed by 27% of all observations—is also defined, in part, by a series of compatibilities between identity categories. For NRs, associations between ethnicity and nationality (Model 1), religion and nationality (Model 2), nationality and dual identity (Model 4), ethnicity and dual identity (Model 5), and religion and dual identity (Model 6) are positive and statistically significant. However, the NR scheme is also marked by the *absence* of a significant relationship between religion and ethnicity (Model 3).

Taken together, the results presented in Figure 4 reveal patterns of compatibility and conflict that have not been detected in prior research. *None* of the clusters are defined by a conflict between ethnic and national attachments. *Dual identity* appears to underpin much of the differences across classes, as some respondents (ERs) follow schemes where dual identification conflicts with ethnoreligious attachments, while others do not (NRs and Concordants). Finally, while some respondents follow schemes where ethnic and religion identification are highly compatible (Concordants and ERs), others adopt schemes where ethnicity and religion are largely orthogonal; for this latter group, it is religion and nationhood that appear to go hand-in-hand.

8.4 CCA Clusters and Levels of Identification

As noted, CCAs do not divide samples into classes based on the beliefs that individuals hold. Rather, CCAs identify clusters of respondents who associate concepts in similar ways (should such



Figure 5: Distribution of scores on the four identity scales across the schematic clusters.

heterogeneity exist). To make this point clear, I use Figure 5 to illustrate the distribution of scores on the four identity scales within and across the three schematic classes.

As Figure 5 lays bare, these classes contain multitudes: individuals with very different beliefs about self-identity are often members of the same class and many respondents with similar identificational profiles belong to different schematic clusters. This underscores a point made in the previous section: CCA classes are not bounded by consensus, but by patterns of "affinity, entailment and opposition among beliefs" (DiMaggio et al. 2018: 32). Thus, cluster-specific central tendencies are not especially informative for interpreting the results of relational class methods (Goldberg 2011).

At the same time, some of the descriptive results displayed in Figure 5 merit further discussion. For example, the conflict between dual identity and ethnoreligious attachments among ERs corresponds to very low levels of dual identification for most cluster members. Here, the relative difference between two modes of identification (e.g., dual identity and religious identity) in terms of *levels* aligns with the oppositional patterns described above.

Conversely, although all aspects of ethnocultural selfhood are compatible for Concordants, the

levels of national identification they report are generally quite low. More concretely, Concordants tend to score low on national identification and high on dual, ethnic and religious attachments even though all four dimensions of ethnocultural identification are positively correlated among subgroup members. Put another way, their low scores on national identification (on average) are not a product of their other ethnocultural attachments — a possibility that has often been overlooked in existing research on *oppositional* cultures or identifies (e.g., Battu and Zenou 2010).

9 Social Attributes and Organizing Schemes

9.1 Multinomial Logistic Regressions: Specifications

Having clarified the broad differences between the three organizing schemes, I turn to the main substantive question posed in the foregoing discussion — namely, are members of different ethnoreligious communities more likely to follow certain organizing schemes over others? To arrive at an answer, I fit two multinomial logistic regression models: Models 7 and 8.

In Model 7, class assignment (into the ER, Concordant or NR classes) is the outcome variable and religious affiliation serves as the focal predictor. In Model 8, class assignment is regressed on the *interaction* between religious affiliation and ethnicity. In both models, religious affiliation is a four-category variable with the following levels: Catholic (19% of all observations), Protestant (14% of all observations), Islam (60% of all observations) and a residual Other category (7% of all observations). Ethnic origin *also* enters both models as a discrete, four-category variable and includes the following levels: Turkey (49% of all observations), the Former Soviet Union (11% of all observations), Poland (7% of all observations) and Other (33% of all observations).

Across the two multinomial specifications, I include survey wave fixed effects and cluster standard errors at the respondent-level. In addition, I include the following variables as controls^{II}: respondent's birth year, sex or gender, the ethnic composition of the respondent's school, and the average occupational prestige score of their parents' profession(s). To account for missingness, I impute missing values using chained equations and pool the estimates of ten imputed datasets to generate the statistical quantities presented in this manuscript. Summary statistics for the covariates featured in this analysis can be found in Appendix B.

The subsections to follow present the results of Models 7 and 8 in turn. I use the results of Model 7 to provide a broad snapshot of the association between religious affiliation and the organization of immigrant "identities." In a second step, I use the results of Model 8 to explain *some* of the internal

^{II} In Model 7, ethnic origin is included as a covariate.



Model 7: Predicting Cluster Membership (AMEs)

Figure 6: Average marginal effect of religious affiliation on cluster membership probability. Model includes survey wave fixed effects are standard errors clustered at the respondent level. In the plot, line ranges (or "whiskers") correspond to 95% confidence intervals.

variation laid bare by Model 7—and specifically, to evaluate whether this heterogeneity stems from ethnic cleavages within faith communities.

Religious Affiliation and Organizing Schemes 9.2

To summarize the results of Model 7, I estimate average marginal effects (AMEs) and adjusted predictions at representative values (APRs) (see Leeper 2018; Long and Mustillo 2021; Williams 2012). To facilitate interpretation, I present these quantities graphically and move more detailed information (coefficient estimates, test statistics) to Appendix B.

The AMEs in Figure 6 capture the average change in the probability of adopting the three organizing schemes (identified through the CCA) for Catholics, Protestants, and other non-Christian



Model 7: Predicting Cluster Membership (Probabilities)

Figure 7: Predicted class proportions by religious affiliation (based on the results of Model 7).

respondents *relative* to Muslims. Like other scholars, I find sharp differences along the Muslim/non-Muslim divide. Catholic and Protestant respondents are, for instance, far less likely to follow the Concordant and ER schemes—and far more likely to be assigned to the NR cluster—compared to Muslims (the reference group). These differences are substantively large (ranging from a change in probability of -0.22 to +0.32) and easily reach significance. Similarly, respondents from *Other* faith communities are significantly less likely (-0.11) to follow the Concordant scheme relative to Muslims and significantly more likely (+0.17) to be assigned to the NR class. Further still, members of Other faith communities are less likely (-0.06) to follow ER schemes *vis-à-vis* Muslims; however, this relative disparity does not reach significance at an α of 0.05.

Figure 7 uses APRs to map the distributional consequences of these differences. Concretely, it plots adjusted predictions for class assignment as a function of religious affiliation. As Figure 7 illustrates, the four faith communities featured in my analysis display distinct distributional profiles. However, differences between Muslim respondents and their peers are especially pronounced. For example, the probability that a Muslim respondent follows an NR scheme is just 0.15 (pursuant to estimates from

	Turkish x Muslim	Other <i>x</i> Muslim	Contrast
Ethnicity-Religion (ER) Scheme	0.5510	0.4537	0.0973
Concordant Scheme	0.3420	0.3732	-0.0312
Nation-Religion (NR) Scheme	0.1070	0.1731	-0.0662

Table 3: Probability of Cluster Assignment for Select Muslim Respondents

Note: Individuals with roots in Turkey and Other origin societies account for the vast majority of Muslim observations in my sample. Highlighted cells signal that a pairwise contrast is significant at an α of 0.05.

Model 7); for non-Muslim respondents, the likelihood of adopting an NR scheme is significantly higher (ranging from 0.32 to 0.47).

For scholars of international migration, this finding may be unsurprising. A voluminous literature on the "cultural integration" of immigrant-origin Europeans consistently finds that Muslim youth stand out from their peers in the cultural arena and routinely confront boundaries that are bright, discriminatory and difficult to cross (for an overview, see Drouhot and Nee 2019). Thus, it is not difficult to imagine why an organizing scheme that sharply aligns religion and nation is out of reach for the vast majority of young Muslims in NRW.

At the same time, nearly 4 in 10 Muslim respondents should, per Model 7 estimates, cleave to an organizing scheme where *all* aspects of ethnocultural identification are compatible with one another (Concordant). This illustrates a broader point that comes into focus in Figure 7: while differences across faith communities are notable, there is a considerable amount of relational heterogeneity *within* putative religious groups as well. Below, I use Model 8 to explore whether some of this variability can be explained by ethnic cleavages within the superordinate bounds of religion. In doing so, I build on the insight that religious traditions, worldviews and institutions are often integrated in disparate ways around the world (cf. Peach 2006; Rieffer 2003).

9.3 Schemes at the Intersections of Religion and Ethnicity

As discussed, Model 8 features an *interaction* between religion and ethnicity on the right-hand side. This allows me to assess whether co-religionists of different ethnic backgrounds display substantively different cluster membership profiles (after regression adjustment). To ease interpretation of model results, I focus on pairwise contrasts of predicted cluster membership probabilities for select Muslim and Christian subpopulations. Full regression results for Model 8 can be found in Appendix B.

Table 3 presents pairwise contrasts between Muslims with roots in Turkey and Other origin societies. As the first and third rows illustrate, the probability of following the ER and NR schemes among Muslims significantly differs along the Turkish/non-Turkish divide: i.e., Turkish-origin Muslims



Figure 8: Pairwise comparisons of predicted cluster membership probabilities for select Christian subpopulations (based on the results of Model 8).



Figure 9: Predicted probabilities of class membership (based on the results of Model 8). Each panel in the plot presents statistically significant gaps between different Christian subpopulations.

are significantly more likely to follow an ER scheme than their co-religionists and significantly less likely to be assigned to the NR cluster.

To explore within-group heterogeneities among Christians, I turn to Figure 8. The figure illustrates 45 pairwise comparisons between select groups at the intersections of denomination and ethnicity. In total, nearly 1 in 5 comparisons reach significance. Figure 9 shines a spotlight on these contrasts, revealing significant relational differences *within* and across Christian denominations. For instance, the figure shows how Protestant respondents with roots in the Former Soviet Union (63% of Former USSR-origin observations) are significantly more likely to follow Concordant schemes *vis-à-vis* Protestants with roots in Poland (14% of Polish-origin observations). Moreover, Catholics from Other origin societies (32% of observations from Other sending societies) are far less likely to follow NR schemes than Catholics of Polish descent (78% of Polish-origin observations).

Globally, the results presented in this section suggest that members of different ethnoreligious communities often follow different schemes to organize their ethnocultural "identities." These differences are not reducible to religion alone: within faith communities, there are meaningful differences in the likelihood of adopting the three organizing schemes identified via the CCA procedure due, in part, to ethnic variation among co-religionists. Future research should consider how other axes of variation—including gender, social class, or partisanship—constrain how immigrant-origin people organize their self-related attitudes.

10 Conclusion

10.1 Summary

This paper set out to reorient research on the organization of immigrants' ethnocultural attachments. In prior work, scholars explored the conflict or compatibility between identity categories using correlational summaries at the population level. In the current study, I advocated for a more *relational* approach to conceptualizing the affinities and oppositions between self-related attitudes. To this end, I shifted focus away from bivariate correlations between concept pairs (e.g., ethnic and national "identity") and towards a more global assessment of the organizing schemes that immigrant-origin people follow to interrelate attitudes about ethnocultural selfhood.

The main argument outlined in this paper can be reduced to two key propositions. First, attitudes about ethnic, national, religious or dual identity are not "held in isolation" from one another (cf. DellaPosta 2020). Rather, they co-occur within individuals and *may* be interconnected in the mind (see Roccas and Brewer 2002; Verkuyten 2018). Second, associations between identity categories are not uniformly distributed among immigrants and their descendants; instead, there are *several* organizing

schemes—or patterns of conflict and compatibility—that are followed by members of the immigrantorigin population to interrelate attitudes about the ethnocultural self.

With these propositions in mind, I conceptualized self-related attitudes as nodes in latent schemes that are unevenly distributed among immigrant-origin respondents. To capture these organizing schemes in survey data, I used correlational class analysis (CCA), a technique designed to find hidden subgroups who associate and dissociate attitudes in similar ways. Ultimately, I found three cultural subsamples (ERs, Concordants and NRs) who follow three distinct schemes to organize their attachments to various ethnocultural categories.

Each of these latent, organizing schemes correspond to patterns of identity conflict and compatibility that have not been reported in the extant literature: *none* of the clusters are defined by oppositions between ethnic and national attachments, *dual identity* drives much of the relational variation across subgroups, while some respondents follow schemes where ethnic and religious attachments are unrelated. This heterogeneity would have been pushed out of view if conventional, variable-centered tools were used in lieu of schematic clustering.

In the final step of my empirical sequence, I considered why individuals follow specific schemes over others. To this end, I focused on ethnoreligious differences as an important part of the story. Using two multinomial logistic regressions, I showed that religion and ethnicity place strong constraints on the kinds of organizing schemes that individuals adopt. Overall, these differences highlight the demographic foundations of what Baldassarri and Goldberg (2014) call "sociocognitive heterogeneity." As my results suggest, an individual's location in social space and the lifeworlds that emerge out of this "gradient positionality" (Bloemraad 2022) help assign a positive or negative charge to the associative ties that fuse identity-related attitudes together.

11 Limitations

Despite the contributions detailed above, the present study is not without limitations. As noted, CCAs cannot (in and of themselves) be used to determine whether the latent schemes uncovered in this paper map onto deep-seated *cognitive structures* that anchor and motivate social behavior in multiethnic settings or if they instead reflect the bundling of concepts, beliefs and positions in the *contexts of reception* that immigrant-origin people are embedded within. With this in mind, future scholarship should test and clarify whether the ecological correlations presented in this manuscript derive from the minds of respondents or the structure of the social environment.

In addition, while my analysis was able to detect broad differences across and within social (i.e., ethnoreligious) groups, it did not systematically examine *why* these differences exist. This is a critical avenue for future research to pursue. Whether explanations are rooted in structural factors, experiences

of discrimination, or the influence of other cognitive-cultural phenomena, a multimethod approach will likely be needed to capture how one's social position, cultural beliefs and embodied experiences give rise to specific patterns of conflict and compatibility.

As this paper demonstrated, techniques that can faithfully retrieve correlational networks from survey data must be included in this multimethod toolkit — to provide a bird's eye view of the organization of immigrant "identities" and to identify *distinct* organizing schemes in a population should such heterogeneity exist.

Declaration of Interest

None.

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Supplementary Appendix

A Correlational Class Analysis



Figure A1: Robustness check for the CCA procedure used in the main text. The top panel represents the original cluster solution (featuring more than one wave per respondent). The bottom panel visualizes the results of an *alternative* CCA restricted to the latest wave per respondent. In both cases, k = 3 is the optimal solution; moreover, the associational patterns across clusters are broadly the same.

B Regression Analysis: Descriptives and Results

Organizing Scheme	
Ethnicity-Religion (ER) Scheme	41.28%
Concordant Scheme	31.56%
Nation-Religion (NR) Scheme	27.16%
Religious Affiliation	
Muslim	60.26%
Catholic	18.80%
Protestant	13.71%
Other	7.24%
Survey Wave	
I	20.04%
2	22.67%
3	23.03%
4	13.91%
5	12.38%
6	7.96%
Origin Society	
Turkey	49.15%
Former Soviet Union	10.53%
Other	33.02%
Poland	7.30%
Respondent's Birth Year	
Before 2000	25.87%
2000	30.60%
After 2000	43.52%
Sex or Gender	
Male	48.58%
Female	51.42%
School Composition (Strata)	
> 15% foreign and < 5% Turkish students	25.19%
10-14.9% Turkish students	29.14%
>= 15% Turkish students	45.68%
Occupational Prestige, Household	
ISEI Value (Divided by 10)	3.35 (σ: 1.54)

Table B1: Summary Statistics

Note: These are *unimiputed* statistics. Occupational prestige variables have significant missingness. "ISEI" stands for *International Socio-Economic Index of Occupational Status*.

		Coef	t
Model 1			
	Ethnicity	0.00	-0.07
	Ethnicity-Religion	_	_
Nationality	Concordant	-1.27	-4.27
-	Concordant x Ethnicity	0.30	4.50
	Nation-Religion (NR)	-0.50	-1.75
	Nation-Religion (NR) x Ethnicity	0.24	3.66
Model 2			
	Religion	-0.06	-1.48
	Ethnicity-Religion	_	_
Nationality	Concordant	-1.87	-6.48
	Concordant x Religion	0.43	6.75
	Nation-Religion (NR)	-1.27	-5.91
	Nation-Religion (NR) x Religion	0.53	10.49
Model 3			
	Religion	0.61	20.01
	Ethnicity-Religion	_	_
Ethnicity	Concordant	-0.22	-1.26
5	Concordant x Religion	0.04	1.19
	Nation-Religion (NR)	2.28	13.72
	Nation-Religion (NR) x Religion	-0.65	-15.46
Model 4			
	Nationality	0.61	18.26
	Ethnicity-Religion	_	_
Dual Identity	Concordant	3.11	25.96
	Concordant x Nationality	-0.44	-10.44
	Nation-Religion (NR)	2.21	13.42
	Nation-Religion (NR) x Nationality	-0.32	-6.22
Model 5			
	Ethnicity	-0.33	-6.13
	Ethnicity-Religion	_	_
Dual Identity	Concordant	-2.II	-6.22
	Concordant x Ethnicity	0.90	12.45
	Nation-Religion (NR)	-1.53	-4.79
	Nation-Religion (NR) <i>x</i> Ethnicity	0.72	9.85
Model 6			
	Religion	-0.33	-7.46
	Ethnicity-Religion	_	_
Dual Identity	Concordant	-2.37	-8.39
	Concordant x Religion	0.95	15.91
	Nation-Religion (NR)	-0.37	-1.66
	Nation-Religion (NR) x Religion	0.44	8.42

Table B2: Linear Regression Results

Note: Highlighted cells indicate that a coefficient is significant at an α of at least 0.05. All models include survey wave fixed effects. Leftmost column indicates outcome variable associated with each model.

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	Concordant vs Ethnicity-Religion		Nation-Religion vs Ethnicity-Religion	
	Coef	t	Coef	t
Religious Affiliation				
Muslim	_	_	_	_
Catholic	-0.05	-0.26	1.55	7.50
Protestant	-0.33	-1.54	1.53	7.21
Other	0.19	0.78	1.13	4.55
Survey Wave				
I	_	_	_	_
2	-0.0I	-0.10	-0.05	-0.37
3	0.35	2.97	0.28	1.98
4	0.31	2.18	0.23	1.38
5	0.40	2.73	0.33	1.95
6	0.58	3.28	0.33	1.61
Origin Society				
Turkey	_	_	_	_
Former Soviet Union	-1.15	-4.66	0.06	0.23
Other	-0.36	-2.56	0.25	1.36
Poland	-0.40	-1.56	0.72	2.61
Respondent's Birth Year				
Before 2000	_	_	_	_
2000	0.12	0.82	0.14	0.85
After 2000	0.00	0.01	0.13	0.88
Sex or Gender				
Female	_	_	_	_
Male	0.21	2.01	0.22	1.79
School Composition (Strata)				
> 15% foreign and < 5% Turkish students	_	_	_	
10-14.9% Turkish Students	0.23	1.45	-0.4I	-2.36
>= 15% Turkish Students	-0.06	-0.39	-0.23	-1.51
Occupational Prestige, Household Average	ge			
Average ISEI Value (Divided by 10)	0.06	1.64	0.13	3.17

Table B3: Multinomial Logistic Regression Results — Model 7

Note: Missing values were imputed using chained equations. Results are pooled (pursuant to Rubin's rules) across ten imputed datasets. Highlighted cells indicate that a coefficient is significant at an α of at least 0.05. "ISEI" stands for *International Socio-Economic Index of Occupational Status*.

	Concordant vs Ethnicity-Religion		Nation-Religion vs Ethnicity-Religion	
	Coef	t	Coef	t
Religious Affiliation				
Muslim		_	_	_
Catholic	0.87	1.18	2.69	3.17
Protestant	0.82	1.19	2.39	3.90
Other	0.01	0.01	I.49	3.42
Origin Society				
Turkey	_	—	_	_
Former Soviet Union	-1.06	-2.56	0.20	0.24
Other	-0.28	-1.87	0.40	1.84
Poland	0.93	0.71	1.88	4.39
Religion <i>x</i> Ethnicity				
Former Soviet Union <i>x</i> Catholic	-0.70	-0.75	-1.08	-0.86
Former Soviet Union x Protestant	-I.4I	-1.68	-1.08	-0.99
Former Soviet Union <i>x</i> Other	0.43	0.48	-0.02	-0.02
Other <i>x</i> Catholic	-I.04	-1.35	-1.29	-I · 47
Other <i>x</i> Protestant	-1.26	-1.67	-0.96	-1.41
Other <i>x</i> Other	0.14	0.21	-0.55	-1.00
Poland <i>x</i> Catholic	-2.25	-1.49	-2.29	-2.39
Poland x Protestant	-2.20	-1.37	-I.4I	-1.50
Poland <i>x</i> Other	-1.92	-1.18	-2.57	-2.95
Survey Wave				
I	—	—	—	_
2	-0.01	-0.II	-0.05	-0.36
3	0.36	3.03	0.29	2.08
4	0.31	2.20	0.23	1.38
5	0.39	2.66	0.33	1.94
6	0.60	3.37	0.36	1.71
Respondent's Birth Year				
Before 2000	_	_	_	_
2000	0.13	0.91	0.16	1.00
After 2000	0.01	0.06	0.15	1.00
Sex or Gender				
Female	_	_	_	_
Male	0.22	2.01	0.22	1.76
School Composition (Strata)				
> 15% foreign and < 5% Turkish students	_	_	_	_
10-14.9% Turkish Students	0.24	1.51	-0.4I	-2.34
>= 15% Turkish Students	-0.04	-0.23	-0.21	-1.39
Occupational Prestige, Household Averag	je			
Average ISEI Value (Divided by 10)	0.06	1.65	0.13	3.10

Table B4: Multinomial Logistic Regression Results — Model 8

Note: Missing values were imputed using chained equations. Results are pooled (pursuant to Rubin's rules) across ten imputed datasets. Highlighted cells indicate that a coefficient is significant at an α of at least 0.05. "ISEI" stands for *International Socio-Economic Index of Occupational Status*.